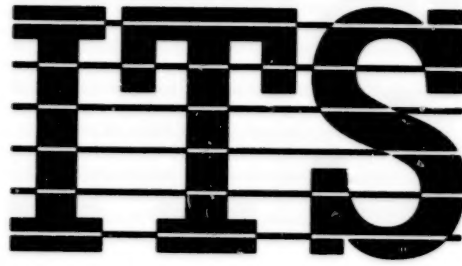


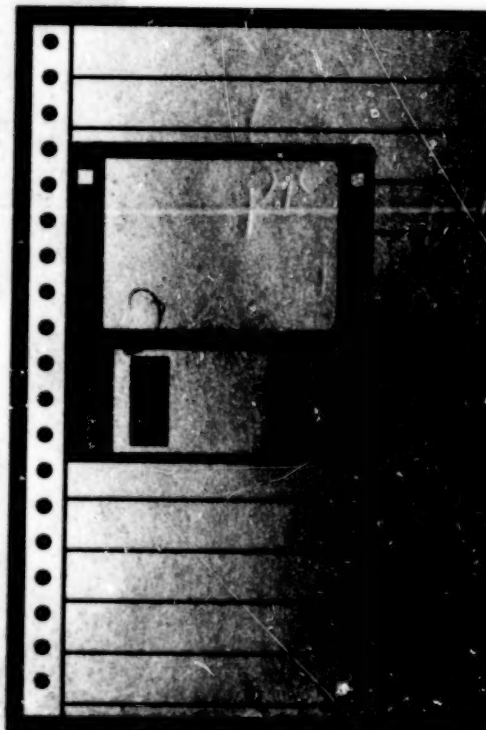
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INFORMATION
TECHNOLOGY
SERVICES

USERS GUIDE



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**USERS GUIDE
TO
INFORMATION TECHNOLOGY SERVICES**

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**INFORMATION TECHNOLOGY SERVICES
LIBRARY OF CONGRESS
Revised May 1994**

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PURPOSE

The purpose of this guide is to provide Library of Congress service unit end users with the necessary tools to interact with Information Technology Services (ITS) in the daily management and development of information systems.

This manual may be photocopied as needed.

Forms referred to in this document are available from the Contracts and Logistics Division (C&L).

Suggestions for changes (additions, deletions, or updates) to this guide should be made through the service unit automation liaison to ITS.

Requests for additional copies of this guide should also be made through the service unit automation liaison.

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SECTION 1. COMPUTER SECURITY

1.1. System Access

The Library provides on-line access to its mainframe computers via TPX, CICS, ROSCOE, and TSO. These are vendor-supplied software systems that provide support for the development and maintenance of specific Library applications. Access to ROSCOE, TSO and TPX, sensitive applications under CICS, and batch jobs, is controlled by CA-ACF2.

Access is obtained through a logon identification (logonid) which is assigned by ITS. To obtain a logonid, use the ADP Service Request, LW 1/65 (rev 3/90); see the subsection entitled "ADP Service Request" below.

A person may have only one logonid. A unique identification is required so that each person can be identified to the system, and CA-ACF2 can determine whether or not access to a resource should be allowed, logged, or prevented. Persons whose logonids have not been used for six months will be sent a memo requesting permission to retire the logonid. Failure to respond within 30 days will result in the retirement of the logonid.

When an employee leaves the Library, because of resignation or retirement, ITS security staff must be notified to retire the assigned logonid. Any critical data associated with the logonid to be retired should be copied to an existing account by the responsible office within 30 days. After 30 days all data will be put on tape and removed from the system. This pertains only to ROSCOE and TSO access, which allow users to create data. ITS security staff must also be informed of staff reassignments and extended leave situations to properly reactivate and/or expire access privileges.

Users should not leave terminals unattended unless they have signed off or locked the terminal via TPX.

1.1.1. Passwords

To gain access to the computer systems, a user supplies his/her logonid and password. If handled properly, passwords provide a reasonable deterrence to unauthorized access. A user should keep his/her password confidential. Passwords should not be readily discernible, such as first name or birth dates. It is not recommended that passwords be contained in a ROSCOE signon procedure. If this situation occurs, the ROSCOE library member containing the password should be restricted.

Passwords may be from one to eight characters in length; longer passwords are preferable. A password should be changed periodically to prevent detection. Each password must be changed at 180-day intervals at which time the user will be prompted by the following message: *ACF01017 PASSWORD FOR LOGONID 111 HAS EXPIRED*. If a password is entered incorrectly, the following error message will appear on the screen: *ACF0102 PASSWORD NOT MATCHED*. If a person continues to submit invalid passwords, eventually that logonid account will be suspended and the following message will appear: *ACF01013 LOGONID 111 SUSPENDED BECAUSE OF PASSWORD VIOLATIONS*. The user must call the ITS Hotline to assign a new password; the original password is encrypted and cannot be retrieved by anyone.

1.1.2. Sign-on Screens

Access to the online system is accomplished via VTAM or TCP/IP, depending upon the user's system configuration. The following are examples of the different MENU SCREENS, depending on which systems your terminal is allowed to access.

VTAM MENU SCREEN (Group 1) CICS ONLY

<p>Library of Congress On-Line System</p> <p>On-Line CICS Application System. Please hit enter to start session.</p> <p>For assistance, call the ITS Hotline, 707-7727</p>
--

This menu screen allows access to CICS only. To log-on to CICS, hit the ENTER key. After you get the response "CICS-VS" in large bold letters, you then sign-on to the application that you desire. Certain applications may first require you to sign-on to CICS by using the CSSN transaction.

VTAM MENU SCREEN (Group 2)
CICS + ROSCOE

Library of Congress On-Line System	
ROSCOE	ROSCOE
CICS	Production CICS System
Enter Selection:	
For assistance, call the ITS Hotline, 707-7727	

This menu screen allows you to log-on to CICS or ROSCOE. You must key in the system that you request (CICS or ROSCOE) and hit the ENTER key. If you key "CICS" and hit the ENTER key, you must wait for the response of "CICS-VS" in large bold letters. You then sign-on to the application that you desire. If you key "ROSCOE" and hit the ENTER key, you will receive the ROSCOE sign-on screen. The number of systems that appear on the initial VTAM MENU SCREEN may vary.

To log-off the CICS system, you must key in "CSSF LOGOFF" and hit the ENTER key. To log-off the ROSCOE system, you must enter "OFF" and hit the ENTER key. This will bring you back to the original VTAM menu screen.

TPX SIGN ON SCREEN

```
LLL                                     Welcome to
LLL                                     Library of Congress
LLL                                     Information Systems
LLL          CCCCCC
LLL      CCCCCCCCCC
LLL      CCC      CCC
LLL      CCC
LLL      CCC
LLLLLLLLLLLLLLLL                      For assistance, please
LLLLLLLLLLLLLLLL                      call 202-707-7727
      CCC
      CCC      CCC
      CCCCCCCCCC      Date 06/09/94      Time 14:04:43
      CCCCCC
```

```
=====
|  TERMINAL  |  MODEL  |  USERID  |  PASSWORD  |  NEW PASSWORD  |
|-----|-----|-----|-----|-----|
|  U078      |  3278-2  |           |           |           |
=====
ENTER /K TO EXIT.
```

ibm2.loc.gov 14:05:03

Key in your user ID (ACF2 logon) and password. The next screen will vary, depending upon specific user privileges.

ACF2 SIGN ON SCREEN

SYSTEM: CICSPR00 DFH2312 - WELCOME TO CICS/MVS -
CICS SYSTEM SECURED BY CA-ACF2/CICS 5.2
TERMINAL: V008
NODE: V008

DAY: MONDAY

SYSTEM DATE: JUNE 13, 1994
SYSTEM TIME: 12:56 PM

LOGON ID: ==>
PASSWORD: ==>

NEW PASSWORD: ==>
(enter twice): ==>

ACFAE131 ACF2/CICS: V008 SIGNOFF HAS BEEN COMPLETED

CICS/VS - ACF2 (SYSTEM SIGN ON/OFF FACILITY)

Key in your logon ID and password.

1.2. Computer Viruses

The phenomenon of widespread computer viruses is very recent. The proliferation of personal computers and networking has provided the environment for viruses to spread. Computer viruses are created by people and are fundamentally a people problem. Viruses require only minimal expertise to implement. Their potential threat is severe, and they can spread very quickly through a computer system or network.

Computer viruses can be controlled by a combination of technical safeguards and administrative procedures. But they cannot be eliminated. Technological fixes are not the final answer; they are valid only until someone creates a new kind of attack. Changes in the way we use computers, however, will reduce our exposure to our own and others' frailties.

A realistic goal for the Library is to provide a reasonably risk-free environment by minimizing the chance of introducing viruses, insuring timely detection of virus infections, and providing reliable means for eliminating infections from PCs. While prevention is helpful, it has its limitations and so timely detection and reliable recovery should be the primary objective of the Library virus protection program.

Personal computer users are in essence personal computer managers, and must practice their management as a part of their general computing. Every personal computer should have an "owner" who is responsible for the maintenance and security of the computer and for following all policies and procedures associated with the use of the computer. It is preferable that the primary user of the computer fill this role.

Through safe computing habits and recovery planning, the threat of computer virus attacks can be met. User awareness is a critical aspect of protection. If users are aware of the threats against them, they may be better prepared to protect themselves. As we become more and more dependent on computers in our everyday lives, integrity becomes more and more critical to our infrastructure. Protection is something you provide, not something you buy.

The proper use of standard procedures can dramatically reduce the threat of computer viruses. Viruses will continue to take their toll until integrity is viewed as the major requirement in information systems.

The following procedures cannot prevent contamination or protect a computer from ALL attacks, but can serve as a guideline for safe computing in the current environment. The active involvement of individual users and management in a virus prevention program is essential. It is ultimately people and their willingness to adhere to security policies that will determine whether systems and organizations are protected.

1.2.1. Procedures for reducing the risk of viruses

1. In general, always use software from reliable sources. Use only licensed copies of vendor software. Store the original copies of vendor software in a secure location. Perform a complete system back-up before loading new software. The first line of defense against a software virus will always be a full and adequate back-up.
2. Run new software on an isolated machine (a PC not connected to a network). Quarantine your test machine. Quarantined machines only use quarantined disks, disks that are not shared with any other machine. Isolating a computing environment from its surroundings is a powerful method of protecting it from software viruses. The quarantined PC should have current virus-detection software installed on it.
3. Never put shareware in a hard disk's root directory. Allow an "incubation" period of activity on the isolated machine before installing new software on personal computers connected to networks.
4. Always use write-protection on removable magnetic media, such as diskettes. Only remove the protection when a specific write to the medium is required. This practice will protect the diskette when the write-protect tab is in place. Removing or disengaging the write-protect tab leaves the diskette vulnerable to an unauthorized write (which may result in a virus).
5. Do not leave a personal computer running unattended. Lock up all removable media when not in use.
6. The best defense is to plan on being infected at some point in your PC's life, and be prepared for a stable recovery. One can plan to survive a software virus through aggressive backups. Perform backups on a regular basis. Always perform a backup before installing new software. Keep at least three generations of complete system backups. Date all backups. All backups should be kept in a secured place. Backups should be performed as often as needed to keep up with changes to critical files. Critical files should be backed up whenever updated.
7. When downloading data from another computer, always download to a diskette instead of to the hard disk. When introducing new software, test on diskettes. If a hard disk system must be used when loading new software always perform a full backup of the hard disk.
8. When recycling a diskette, always use the DOS FORMAT command to reformat the disk; do not simply erase all the files from the diskette. Don't accept disks from unknown or untrusted sources. Reformat all empty disks given to you as a precaution.
9. Never boot a hard disk system from an unknown diskette.
10. When transferring files on a diskette, place the output data on a diskette that has no executable files. Executable files have extensions of .exe., .com., or .bat.

1.2.2. Procedures for dealing with a virus

If a virus is suspected of infecting the PC the following procedures should be followed:

1. If you suspect a virus, leave the machine running. A computer which has been infected by a virus may manifest symptoms identical to a hardware failure. Turn off the machine only upon instruction from the ITS HOTLINE. Notify the HOTLINE immediately and inform them if the PC is connected to a network. The network connection should be broken as soon as possible. If you are not familiar with or do not have virus removal software, inform the HOTLINE.

2. If you need to remove a suspicious file without performing a full recovery, remove the file with virus removal software. Do not use the DOS DEL or ERASE commands, which merely replace the first letter of the file name.

3. It is important to try to identify the source of the virus infection if at all possible. There are only four ways in which a virus can be introduced on a computer:

- A diskette (or other removable medium) with an infected program or boot sector was accessed by the PC.

- An infected program was downloaded to the PC from an outside source such as a Bulletin Board System (BBS).

- An infected fixed disk drive was installed in a PC.

- An infected network resource virus was accessed.

4. If you have located the original virus diskette, scan it with virus detection software on a non-networked PC.

5. Reboot your machine from a write-protected, uncontaminated copy of your system software. Reformat the contaminated hard disk. The FORMAT.COM routine must reside on your trusted DOS backup. The reformat followed by a complete power down should wipe out any contaminant. The power down cleans the volatile memory of any programming remnants.

6. Rebuild your hard disk from a trusted backup. If the backup appears to be contaminated, then you will have to do a complete reformat again, from the trusted DOS source, and start building your system all over again. Viruses can go undetected in a system for a long time, and thus can be backed up along with normal system data. The safest procedure is to restore programs (executable and command files) from their original vendor media if possible. Do not reconnect to any network until you are sure that you have a clean machine.

SECTION 2. ITS HOTLINE PROCEDURES

The ITS Hotline consists of a group of individuals who receive calls about at least 35 different types of equipment and are expected to solve whatever problem a user encounters when working on the Library's on-line system. Staff in the Hotline track the status of the on-line system during these hours. In order to keep track of all the trouble calls and questions, the Hotline also logs in calls or written requests before they are routed to the operations, development, or telecommunications staffs in ITS.

Before placing a call to the Hotline, a staff member should be sure to have certain information available, such as:

- terminal ID where you are working.
- application you are using.
- transaction you are trying to enter.
- command you are using.
- problem you have encountered.
- message you see on the screen.

2.1. Normal Hours of Operation

The on-line systems are operational at all times the Library's reading rooms are open, and the Hotline number is staffed during these hours:

Monday - Friday.....6:15 a.m. - 6:00 p.m.
Saturday.....8:00 a.m. - 4:30 p.m.

At times outside these hours, the Hotline telephone number (7-7727) is answered by staff in the Computer Service Center.

2.2. Hardware Problems

A hardware problem is defined as a malfunction of either a printer or a terminal (or a display monitor of a pc that is connected to the mainframe), such as:

- no response
- no display
- cannot key to screen
- garbage on screen
- distorted display
- display is not what was keyed
- printer will not print
- fuzzy or blurry print

If you encounter one of these malfunctions, please try to resolve your problem by referring to the page in this manual where your equipment is described. If the steps on that page do NOT solve your problem, call the Hotline at 7-7727 for assistance.

2.3. Hardware Information Needed by the Hotline

Information needed by the Hotline staff when you are reporting a hardware problem report to them includes the following eight items; without this information the Hotline will not be able to help you:

1. Your name (in case they need to call you back)
2. Your telephone number
3. Your division
4. What type of terminal you are using
5. Terminal ID; if your terminal is one of the following, the ID will look like the example shown in parentheses:
 - Comterm (F051)
 - Northern Telecom (A011)
 - buffered Tally printer (PA13)
 - buffered Genicom printer (P101)
 - Dataspeed model 4540 crt (AB06)
 - Dataspeed model 4540 printer (PB19); also known as Bell printers
 - Data General (console # & application: ISIS or COINS)
 - personal computer (M001 or W345)
 - IBM 5230 device (Order Division only)
6. Serial number; if your terminal is one of the following, the ID will look like the example shown in parentheses:
 - Visual 300 (305260)
 - T.I. (Texas Instrument) (21034)
 - Tally printer, local or buffered (79T12347)
 - Olivetti printer (115391)
 - Genicom printer (G.E.) (8632-2-59225)
 - Hewlett-Packard printer (8632-2-59225)
7. Location of terminal (e.g., room LM-543)
8. Description of problem

2.4. Software Problems

A software problem is defined as an unexpected response or an error message you receive while working at your terminal. Before you call the Hotline at 7-7727, be sure to gather the information needed for a Hotline staff member to assist you; see below.

2.5. Software Information Needed by the Hotline

Information needed by the Hotline staff when you are reporting a problem to them includes the following nine items; without this information the Hotline will not be able to help you:

1. Your name (in case they need to call you back)
2. Your telephone number
3. Your organization
4. What type of terminal you are using
5. Terminal ID; if your terminal is one of the following, the ID will look like the example shown in parentheses:
 - Comterm (F051)
 - Northern Telecom (A011)
 - buffered Tally printer (PA13)
 - buffered Genicom printer (P101)
 - Dataspeed model 4540 crt (AB06)
 - Dataspeed model 4540 printer (PB19)
 - Data General (console # & application: ISIS or COINS)
 - personal computer (M001 or W345)
 - IBM 5230 device (Order Division only)
6. What type of transaction you were performing when you received the unexpected response or error message.
7. What you had keyed and entered when you received the unexpected response or error message.
8. The exact response or error message that you received on your screen.
9. The time the software problem occurred.

If the software problem is a recurring one, but does not actually keep you from doing your work, you may send a written ADP Problem Report (form LW 1/65a rev 6/86) to the ITS Hotline, via your automation liaison (who has signature authority). This will provide information to your own division that there is a problem.

For more information about the request forms, see below.

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SECTION 3. SELF-HELP PROCEDURES

This section includes some self-help procedures for users to try prior to placing a call to the ITS Hotline. However, if the following basic troubleshooting techniques do not solve your problem, or if your problem is not covered below, please call the Hotline, 7-7727; be sure to have the required information with you before you call (see Section 2).

3.1. COMTERM

<u>Problem</u>	<u>Resolution(s)</u>
No response	1. Check the status line at the bottom of the screen. There should be a "[4]" or "[4]A" in the lower left corner of the screen. If not, hit the "RESET" key. If the "[4]" or the "[4]A" still do not appear, please call the ITS Hotline.
No display	1. Hit the "RESET" key. 2. Check for red light in lower right corner of keyboard. 3. Check to be sure the power cord is plugged into BOTH the back of the terminal and the electrical outlet securely. 4. Check that the terminal display brightness is up high enough to display the data; you can adjust the brightness of your terminal by holding down the "ALT" key and repeatedly hitting the "BRIGHT" key. If you repeatedly hit the "BRIGHT" key <u>without</u> holding down the "ALT" key, the display will fade out.
Unable to key to screen	1. Hit the "RESET" key and reenter. 2. Hold down the "ALT" key and hit the "CLEAR" key. 3. Hold down the "ALT" key and hit the "RESET" key. 4. Download terminal and try again to key.

3.2. DATA GENERAL

<u>Problem</u>	<u>Resolution(s)</u>
No response	1. If a wand reader is attached to the terminal, be sure that it is powered on. If still no response, power off and back on. 2. Hold down the "CTRL" key and hit the "Q" key.
No display	1. Check that the terminal is turned on and that the brightness knob is turned up. 2. Check that the power cord is plugged into BOTH the terminal and the electrical outlet.
Garbled display	1. Check that the "DATA RATE" switch on the back of the terminal is set to the proper setting. 2. Check the "PARITY" switch on the back of the terminal. It is a 3-position switch: "ODD", "NONE", "EVEN" parity; it should be in the middle position, "NONE".

3.3. DATASPEED TERMINAL

<u>Problem</u>	<u>Resolution(s)</u>
No response	1. Check for any lights on the keyboard. If no lights are on the keyboard, hit the "RESET" key and then the "LOCAL" key and resend the transaction.
No display	1. Check that the device is plugged into the electrical outlet. 2. Check that the terminal is powered on. There are two power switches on the terminal: the main power switch is located on the pedestal under the monitor and controls power to both the keyboard and the monitor. The other power switch is located under the monitor on the left side and controls the monitor only. 3. Check the intensity control, located under the right side of the monitor; it controls the brightness.
Unable to clear or key to screen	1. Hit the "LOCAL" key and then the "CLEAR" key.

3.4. DATASPEED PRINTER

<u>Problem</u>	<u>Resolution(s)</u>
Will not print	1. Check that the device is plugged into the electrical outlet. 2. Check that the printer is powered on. 3. Check that the printer has paper and the paper is installed properly. 4. Hit the "FORM ADVANCE" button. If the paper advances, power the printer off and back on and resend the data. If the paper does not advance, make sure that the top cover is closed securely.
Blurry/faded print	1. Replace the ribbon.

3.5. GENICOM PRINTER

This printer is programmable. If you have a problem, first check to see that the various options are set properly:

1. Set the printer to "LOCAL" status by pushing the "ONLINE" button (it is a toggle switch that changes the printer back and forth between local and online).
2. Push the "PRG" (program) button.
3. The printer will print out the current configuration of the printer's options.

4. Compare the current configuration of options to the standard settings for the terminal you are using:

- a. Northern Telecom
- b. Data General

If the options are not set properly, contact your automation liaison. If the options are set properly and you still have problems, contact the ITS Hotline, 7-7727.

3.6. NORTHERN TELECOM (MODEL 297)

****SEE ALSO SECTION 3.7.1. BELOW****

<u>Problem</u>	<u>Resolution(s)</u>
No display	<ul style="list-style-type: none">1. Check that the power cord is plugged into BOTH the back of the terminal and the electrical outlet.2. Turn up the contrast and/or the intensity controls.3. Switch the terminal power off and back on.
No response	<ul style="list-style-type: none">1. Hit the "RESET" key on the keyboard.2. Switch the terminal power off and back on.
Cannot clear screen	<ul style="list-style-type: none">1. Hit the "RESET" key and then the "CLEAR" key on the keyboard.2. Switch the terminal power off and back on.

3.7. NORTHERN TELECOM (MODEL 298)

****SEE ALSO SECTION 3.7.1. BELOW****

<u>Problem</u>	<u>Resolution(s)</u>
No display	<ul style="list-style-type: none">1. Check that the power cord is plugged into BOTH the back of the terminal and the electrical outlet.2. Turn up the contrast and/or the intensity controls.3. Switch the terminal power off and back on.
No response	<ul style="list-style-type: none">1. Check the status line at the bottom of the terminal. There should be a "[4]" or "[4] A" in the lower left corner of the screen; if not, hit the "RESET" key.

Problem

Resolution(s)

2. If you are attempting a local print and you see the symbols "X ☐ ---- ☐ " on the status line, this means the printer is not available. Clear this condition by turning off the power to the printer and buffer, then hold down the "ALT" key and hit the "RESET" key. Now press down the "RESET" key and the symbols should disappear; hit the "CLEAR" key and the screen should be clear. Try another search to get a display on the screen. When you get a display back, turn the power back on the printer "first" to ensure that the proper status lights are on. Turn on the buffer power and wait till you have only a green status light on the buffer. If all status conditions are good you should be able to print. If you again see the symbols "X ☐ ---- ☐ ", notify the ITS Hotline.
 3. If you are trying to print and you see the symbols "X ?+" on the status line, this means that the user continued to key when the "PRINTER BUSY," "PRINTER NOT WORKING," or "TIME" symbols were displayed on the terminal. Clear this condition by holding down the "ALT" key and hitting the "RESET" key.
 4. If you are trying to print and see the symbols "X ☐ ---- ☐ " on the status line, this means that the printer is busy, but your print is scheduled and will take place.
 5. If you get a status of "X???", where the ??? are numeric characters, call the Hotline.
 6. Switch the terminal power off and back on.
- Cannot clear screen
1. Hit the "RESET" key and then the "CLEAR" key on the keyboard.
 2. Switch the terminal power off and back on.

3.7.1. GENICOM STANDARD SETTINGS FOR NORTHERN TELECOM

****SEE ALSO SECTIONS 3.6. AND 3.7. ABOVE****

The present configuration is (44a505757)

1. font:
style - (44a506150) gothic nlq
cpi - 10.0
country - usa
mode - normal
2. lpi - 6
3. forms control:
forms length - 11.0"
top margin - 0.0"
bottom margin 0.0"

4. interface control:
 interface type - centronics
 interface straps a:
 0 1 2 3
 12345678901234567890123456789012
 00000000000000000000000000000000
 interface straps b:
 0 1 2 3
 12345678901234567890123456789012
 00000000000000000000000000000000
5. margin settings:
 left margin - 0.0"
 right margin - 13.6"
6. horizontal tab stops:
 none
7. vertical tab stops:
 none
8. printer control straps:
 printer straps a:
 0 1 2 3
 12345678901234567890123456789012
 00000000000000000000000000000000
 printer straps b:
 0 1 2 3
 12345678901234567890123456789012
 00000000000000000000000000000000

Press the number "0" to return to normal operation.

To continue modification select (1-8).

3.7.2. GENICOM STANDARD SETTINGS FOR DATA GENERAL

The present configuration is (44a505757).

1. font:
 style - (44a506150) draft
 cpi - 12.0
 country - usa
 mode - normal
2. lpi - 6
3. forms control:
 forms length - 11.0"
 top margin - 0.0"
 bottom margin - 0.0"

4. interface control:
 interface type - serial
 input buffer length 0512
 interface straps a:
 0 1 2 3
 12345678901234567890123456789012
 00000000000000000000000000000000
 interface straps b:
 0 1 2 3
 12345678901234567890123456789012
 00000000000000000000000000000000
 speed - 1200
 parity - space
5. margin settings:
 left margin - 0.0"
 right margin - 13.6"
6. horizontal tab stops:
 none
7. vertical tab stops:
 none
8. printer control straps:
 printer straps a:
 0 1 2 3
 12345678901234567890123456789012
 00000000000000000000000000000000
 printer straps b:
 0 1 2 3
 12345678901234567890123456789012
 00000000000000000000000000000000

Press the number "0" to return to normal operation.

To continue modification select (1-8).

3.8. LEE DATA MISCELLANY

<u>Problem</u>	<u>Resolution(s)</u>
Kill the squeak	Press "ALT" and the key next to "ENTER" (with megaphone on front).
Inhibit waiting	Try "RESET"; if problem continues, call the Hotline, 7-7727, and ask them to check the status of the line.
Screen lockup after failed printing	Press "ALT" and "RESET" (device cancel).

<u>Problem</u>	<u>Resolution(s)</u>
Identify printer	Press "ALT" and "PRINT" key (IDENT), type "99" in the local field, and enter.
Reset controller	Flip "RESET" key on front of controller: down and back up (<u>be sure no one is in mid-search and gets cut off</u>).
Dial out	Unless otherwise instructed, Lee Data terminals are tied to LC. Press "LOCAL" key, type "EAM" (enter asynchronous mode), then enter the profile number (00=ILS; 01=databases; etc.). "ALL BUSY" means someone else is on or forgot to sign off; look for "CONN" in "LOCAL" field on your neighbor's terminal.
Profile 00	Hayes dumb modem for "ILS" only. Should stay dialed all week, barring thunderstorms or problems at OCLC Washington. Hit the "ENTER" or "BREAK" key if signon has dropped out. Contact the Hotline to restore the connection or signon. When finished, <u>do not sign off the system!!</u> Just press the "LOCAL" key and enter "TER"; this preserves the connection for the next person.
Profile 01-03	Ventel programmable modem. Hit "ENTER" key twice; password is "LOAN". At menu, type number of system desired. When search is completed, exit from it as usual and "BYE"; press "LOCAL" key and enter "TER" and return to the LC system.
Printing HIS	To print CRT's without slave printer, the system (Printer 12) must be identified. In 3270 (i.e., LC) mode, press the "LOCAL" key, type "AAP" (assigned asynchronous printer) and make "LU" (local unit) equal to "12". When back in 3270 mode, press the "LOCAL" key, type "RAP" (release asynchronous printer), make "LU" (local unit) equal to "12", and hit the "ENTER" key and the "RESET" key to get out of local mode.
Continuous print	Depress the "PF LOCK" key and hit the "IDENT" key.

3.9. OLIVETTI PRINTER

<u>Problem</u>	<u>Resolution(s)</u>
Will not print	<ol style="list-style-type: none"> 1. Check that the printer is plugged into the electrical outlet and the "on" light is lit. 2. Check that the paper release lever (located on the left side of the printer) is set to the proper position. If not, the "LOCAL" light will be lit.

Problem

Resolution(s)

3. Place the printer into "LOCAL" mode and push the "TEST" switch forward. The printer should print rows of the character "L." If not, call the Hotline.
4. Place the printer back into the online mode.
5. Switch the printer power off and back on.

3.10. CRS IMAGE SYSTEM

SCORPIO Problems

Resolution(s)

Unable to access SCORPIO through the 3270 window on an image workstation

Ensure that the mouse pointer (↑) is within the SCORPIO window; click once on the left mouse button, and hit the return key once.

"REQUESTER has not been entered" message when issuing a SCORPIO PRINT TEXT request

Enter a requester name (e.g. REQ=Lastname, Title, Firstname) and resubmit your request.

"Printer ID invalid" message when issuing a SCORPIO PRINT TEXT request
printer IDs.

Provide a valid Printer ID (e.g. Prtr=0).
If you do not have a valid Printer ID, contact the CRS Automation Office for the list of valid

Error message PRNT0601:
"Image system is temporarily unavailable" message when issuing a SCORPIO PRINT TEXT request

Call the ITS Hotline with:
1-workstation or terminal ID
2-location
3-your name
4-phone number

Error message PRNT0605:
"Technical Difficulty" when issuing a SCORPIO PRINT TEXT request

Request print again. If 605 error reoccurs, call the ITS Hotline with:
1-workstation or terminal ID
2-location
3-your name
4-phone number

Error message PRNT 0077:
"...attempt to change the destination option..." message when issuing a SCORPIO PRINT TEXT request

DESTINATION is not a valid field name for PRINT TEXT command. Do not attempt to enter a destination. Continue or cancel request.

Problem

Error message PRNT0108:
"ACNO has not been entered but is required" message when issuing a SCORPIO PRINT TEXT request

Error message PRINT0109:
"Document locator file name is not present"

Error message PRINT0115:
"full text of document has not been placed on optical disk" message when issuing a SCORPIO PRINT TEXT request

Image Terminal Retrieval Problems

"Bad LRS Number entered" message received at an image workstation

"No such document in Database!" message received at an image workstation

Unable to enter a Document Number

When trying to retrieve a document, status line does not change from "retrieving" to "viewable"

When trying to retrieve a document, status line changes from "retrieving" "unknown error" whereby document cannot be viewed

Resolution(s)

Display the full text display of the citation using command:
d item or d item/copy or via direct display using LRS/LTR number.
Repeat the PRINT TEXT command.
If it fails, sign out of file and back on, then repeat the full text display command.

Sign out of file and back on.
Repeat request.

Check the Full or Brief displays for message indicating availability of the document on optical disk. If you have reason to believe that the requested document should be available on disk, contact the CRS Master File Unit at 7-8173.

Resolution(s)

Clear the message and ensure that a valid document number has been entered at the "Document Number" prompt; or clear the message and continue processing.

Try another document number; or if you have reason to believe that the requested document should be available, contact the CRS Master File Unit.

Ensure that the mouse pointer (↑) is not in the SCORPIO window and that the field indicator (▲) is properly positioned at the Document Number field.

View any document which is viewable. Clear all. Request the document again with the unchanged status. If the results are the same, call the Hotline.

View any document which is viewable. Clear all. Request the document again with the unchanged status. If the results are the same, call the Hotline.

Image Terminal Retrieval Problems (cont'd) Resolution(s)

When trying to print a document, status line does not change from "spooling" to job #### whereby the document does not print

Print any other documents requested. Clear all. Request document again and retry printing. If the results are the same, call the Hotline.

Image Workstation Problems

Resolution(s)

A "cmdtool (CONSOLE)" window appears in the upper left corner of your screen

Use the mouse to position the mouse pointer (↑) within the "cmdtool (CONSOLE)" window, then press the FRONT key at the left side of the workstation keyboard.

No response or screen dark on image workstation

Hit the Return Key once. If no response, call Hotline and report:

- 1-your name
- 2-phone number
- 3-workstation or terminal ID
- 4-location

Logon screen message and logon prompts preceded by backslashes

Logout:
Hit the return key once at the USERNAME: prompt without entering your username. Then, login again using lowercase characters (i.e., at the login prompt, enter loc).

Printer Software Problems

Resolution(s)

Printer monitor reads "!!Warning"
Printer freezes and won't print

Call ITS Hotline and report:

- 1-printer number
- 2-location
- 3-your name
- 4-phone number

Within a print job, a portion of the job is blank

Call ITS Hotline and report:

- 1-printer number
- 2-location
- 3-your name
- 4-phone number

In the middle of a print job, a full/partial black or gray page is printed. In retrieval, the following message appears: "could not get requested page"

Call ITS Hotline and report:

- 1-printer number
- 2-location
- 3-your name
- 4-phone number

Printer Software Problems (cont'd)

Complete job, not just cover sheet,
prints on yellow paper

Resolution(s)

Turn printer (not hopper) off/on
(NOTE: If hopper is also turned off, it is important
to first turn on the hopper and then the printer).
Reset the printer software using #18 on the menu.
(Use #7 to toggle between menus). Printer should
resume. If printing does not resume, call the ITS
Hotline and report:
1-printer number
2-location
3-your name
4-phone number

Printer Hardware Problems

Printer jams
Toner Replacement
Toner tray related difficulties
Poor quality prints

Resolution(s)

Contact CRS Automation at 7-6477 to
resolve printer hardware problems.

3.11. COPYRIGHT IMAGING SYSTEM

At time of printing this guide, the Copyright Imaging System had only recently been placed in production. Until such time as a problem/resolution list is developed, user documentation for scanning and retrieval is available through your automation liaison. Problems should be reported to the ITS Hotline or the Copyright Automation group (7-8370).

3.12. PERSONAL COMPUTER

Please have the following information available when you call the Hotline about a problem you are having with your personal computer:

1. Your name.
2. Your phone number.
3. Your division.
4. Room location of the pc.
5. "M" or "W" number assigned to the pc.
6. Brief, but specific description of the problem.

3.13. TALLY PRINTER, SERIES 1100 AND 1200

<u>Problem</u>	<u>Resolution(s)</u>
Will not print	<ol style="list-style-type: none">1. Check that the printer is plugged into the electrical outlet and that the power switch is turned on.2. Check that both the print switch and print light are on.3. If the printer is a buffered printer, turn off BOTH the printer and the buffer. Turn the printer power back on, followed by the buffer.
Fuzzy print	<ol style="list-style-type: none">1. Replace the ribbon.2. Check that the printer head level is set correctly (lever moves print head closer to or farther from the ribbon).
Printing a pattern	<ol style="list-style-type: none">1. Move the lines per inch switch, located at the top right of the terminal, out of the "T" position ("T" means test mode). Set the switch to either 6 or 8 lines per inch.

3.14. TALLY PRINTER, SERIES 1600

<u>Problem</u>	<u>Resolution(s)</u>
Will not print	<ol style="list-style-type: none">1. Check that the printer is plugged into the electrical outlet and that the power switch is turned on.2. Check that BOTH the print switch and print light are on.3. If the printer is a buffered printer, turn off BOTH the printer and the buffer. Turn the printer power on, then the buffer.4. Reprogram the printer according to the appropriate operator's manual (either model 1602 or 1612).
Fuzzy print	<ol style="list-style-type: none">1. Replace the ribbon.
Printing a pattern	<ol style="list-style-type: none">1. Move the lines per inch switch, located at the top right of the terminal, out of the "T" position ("T" means test mode). Set the switch to either 6 or 8 lines per inch.

3.15. TEXAS INSTRUMENT PRINTER, MODEL 820

This printer is programmable. If you have problems, check to see if BOTH the "configurations" option and the "format" option are set properly.

To check

Configurations

1. Place the "LINE//LCL" switch to the "LCL" or (.) standby position.
2. Simultaneously depress the "CTRL", "SHIFT", and the "3" keys.
3. Printer will print the current configurations options.
4. The standard options are 13;25;32;83:

13 = full duplex

25 = 1200 baud

32 = transmit even parity, no received parity check.

83 = transmit DC3 or "BREAK" on printer busy, DC1 on ready.

If the options printed out are not the standard options, check with your automation liaison person to see what options are correct for your use. If the options are correct and you still have a problem, call the Hotline, 7-7727.

To check

Format Options

1. Place the "LINE//LCL" switch to the "LCL" or (.) standby position.
2. Simultaneously depress the "CTRL", "SHIFT", and the "5" keys.
3. Printer will print the current format options.
4. The standard options are 030;001;132;001;030;6;10:

030 = form length (30 lines)

001 = left margin (column 1)

132 = right margin (column 132)

001 = top margin (line 1)

030 = bottom margin (line 30)

6 = lines/inch (6 lines per inch)

10 = char/inch (10 chars per inch)

If the options printed out are not the standard options, check with your automation liaison person to see what options are correct for your use. If the options are correct and you still have a problem, call the Hotline, 7-7727.

3.16. VISUAL 300

Problem

Resolution(s)

No response

1. Check that the device is plugged into the electrical outlet and that the terminal power is turned on.
2. Check that the modem is set to the proper speed.
3. Place the terminal into the "SET UP" mode and check that all the menu options are set properly (see the Visual 300 Settings which follow these resolutions).

- | | |
|--------------------|---|
| No display | <ol style="list-style-type: none">1. Check that the terminal is plugged into the electrical outlet securely.2. Hit the space bar.3. Hit the "SET UP" key and repeatedly hit the "UP" arrow key, located on the right side of the top row of keys (the "DOWN" arrow key will dim the display). |
| Dim display | <ol style="list-style-type: none">1. Hit the "SET UP" key and repeatedly hit the "UP" arrow key, located on the right side of the top row of keys (the "DOWN" arrow key will dim the display). |

A QUICK REFERENCE TO VISUAL 300 SETTINGS

Press SET UP key; change your settings to match those shown in the following 7 menus by pressing the function ("F" key) next to the setting.

F1=	F2=	F3=	F4=	F5=	F6=	F7=	F12=
online	convrs	unprot	silent	normal	jump	reset	menus

Press F12

	<u>editing menu</u>	
editing extent:	field	F1
erasure:	disabled	F2
control representation:	disabled	F3
auto tab:	enabled	F4
auto line wrap:	enabled	F5
auto new line:	disabled	F6

Press F12

	<u>transmit/receive menu</u>	
line transmit:	disabled	F1
guarded area transmit:	disabled	F2
transfer termination:	disabled	F3
multiple area transmit:	enabled	F4
transmit request:	disabled	F5
function key message framing:	enabled	F6

Press F12

	<u>communications menu</u>	
parity sense:	enabled	F1
parity select:	even	F2
bits per character:	7	F3
duplex:	full	F4
auto xon/xoff (xmtr):	disabled	F5
auto xon/xoff (rcrv):	disabled	F6
local echo (cms):	disabled	F7
(legis):	enabled	F7
turnaround:	code	F8
transmitter rate:	1200	F9
receiver rate:	1200	F10

Press F12

	<u>printer menu</u>	
copy mode:	disabled	F1
controller mode:	disabled	F2
auto print:	disabled	F3
underline sequence:	disabled	F4
escape suppression:	disabled	F5
linefeed suppression:	disabled	F6
printer busy select:	xon/xoff	F7
cancel select:	cancel	F8

Press F12

	<u>printer interface menu</u>	
parity sense:	enabled	F1
parity select:	even	F2
bits per character:	7	F3
busy polarity:	high	F4
printer rate:	1200	F5

Press F12

	<u>message framing codes</u>	
start of message:	002	F1
area separator:	031	F2
first end of line:	000	F3
second end of line:	000	F4
first end of message:	004	F5
second end of message:	004	F6
turnaround control code:	004	F7

Press F12

	<u>terminal status</u>	
refresh rate:	60hz	F1
screen saver:	enabled	F2
status line:	blanked - visible	F3
cursor type:	underline - block	F4
cursor blink:	slow - fast	F5
default intensity:	normal	F6
emulation:	v300 - vt100	F7
keyboard:	english	F8

SHIFT S to save your settings. SET UP key to leave set-up mode.

3.17. Telephones

A telephone problem is defined as either a phone which cannot place or receive calls satisfactorily, or which has an inoperative feature (such as Call Pickup or Long Distance Dialing). Furthermore, an inoperative feature means that any feature which normally works on your phone has quit working. To request changes to features, see Section 4.3.4. below.

Before calling the ITS Hotline to report a telephone problem, review the following:

- If you are able to initiate telephone calls but are unable to receive calls, your telephone is probably either forwarded or is in Send All Calls mode. These conditions are indicated by a brief "half" ring whenever someone attempts to call you.
- To cancel Call Forwarding, pick up the receiver and hear dial tone. Then dial "13". You should hear confirmation (3 quick beeps).
- To cancel Send All Calls, pick up the receiver and hear dial tone. Then dial "#3". You should hear confirmation (3 quick beeps).

If these techniques do not resolve your problem, call the Hotline at 7-7727 and have following information ready:

1. Your name.
2. A call back number. If your phone has no dial tone, DO NOT give that as a call back number.
3. Your organization.
4. The phone number of the problem telephone.
5. Description of the problem. Please be as specific as possible. For an intermittent problem, please give dates and times of recent occurrences.

3.18. Local Area Networks

Local Area Network connectivity problems can be difficult to diagnose from the user station. ITS is developing more sophisticated network management and monitoring facilities. In the future, Hotline personnel will be alerted to problems before most users experience the symptoms of the problem. Nonetheless, occasional local outages will occur.

Many variations in equipment, configuration and installed software exist in personal computers in the Library. It is difficult to briefly describe all the potential problems and appropriate solutions in a users guide. This section provides some basic suggestions for the resolution of simple LAN problems and instructions for reporting those problems which cannot be corrected locally.

ProblemResolution(s)

Local resources
unreachable

1. If possible, check the ability to communicate with the ITS mainframe or other remote resources. If the mainframe is reachable, then look for a problem with the local resource (e.g. is the server or printer on?)
2. If the remote resources are not reachable, then look for obvious causes of the disconnect such as a wire kicked loose under the desk. A simple reboot may resolve the problem. If so, make a note for future resolution of the same problem.

Remote resources
unreachable

1. Again, check if local resources are reachable. If so, determine if anything in the PC environment has changed (e.g. any new software added, especially terminate and stay resident (TSR) packages). Has anything been removed? If this fails, attempt a reboot.
2. If local resources are unreachable, then check for obvious problems with the wire connection between the PC and the service jack.

If the above suggestions do not resolve the problem, call the ITS Hotline (7-7727).
Please have the following information available:

1. Your name.
2. Your phone number.
3. Your organization.
4. Room location of the PC.
5. "M" or "W" number assigned to the PC.
6. Brief, but specific description of the outage.

3.19. ACCESS

ProblemResolution(s)

Out of ACCESS
ACCESS screen,
back to DOS
(c:EASEL/ACCESS)

1. Type "ACCESS" and wait approximately 30 seconds while signs on.

Blank screen
(black or empty)

1. Check for green power light at the lower right hand corner of the monitor. If it is not lit, proceed to step 2. If it is still not lit, proceed to step 3.
2. Check the cable connected to the back of the monitor (on the right rear side as you face the monitor).
3. Check the controls for brightness (setting may be turned down too low to see image).

<u>Problem</u>		<u>Resolution(s)</u>
Screen is frozen, won't respond to touch	1.	Turn machine off, wait 20 seconds, turn back on. Wait for software to sign back on (logo screen will appear in about 30 seconds).
Black screen with "301 = OK - IBM"	1.	Turn machine off, wait 20 seconds, turn back on.
"NO RESPONSE" longer than 3 minutes	1. 2.	1. Call ITS Hotline (7-7727) to verify that system is up. 2. If system is up and message won't clear, restart ACCESS (turn machine off, wait 60 seconds, turn back on). Software will sign back on and logo screen will appear.
"SYSTEM DOWN" message remains on screen	1.	Type "ctrl", then "E".
Screen display is compressed on monitor and won't respond to touch	1. 2.	1. Check the monitor controls at the bottom front edge of the Pull open the panel that covers the controls. Positioning controls on the left need adjusting back to a full size screen. 2. If this fails, call the ITS Hotline (7-7727) who will in turn refer the problem to an ACCESS programmer.

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SECTION 4. REQUESTS FOR SERVICE

As discussed in Section 2, users may telephone the ITS Hotline at 7-7727 to report an immediate problem (e.g., terminal not working) or to request information about the status of the on-line system (e.g., when SCORPIO will be back in service). However, there are a variety of less immediate services which require the user to submit a specific request form. These services come under the general heading of ADP or telephone service.

LCR 1614-4 describes the Library's procedures for requesting services from ITS. Services which may be requested are explained more fully below, including the instructions needed for completing specific forms. See the Appendix for samples of the forms.

NOTE: Before submitting a request to ITS, please check with your own service unit automation liaison for any internal procedures which may be required. Also, there are specific individuals who are authorized to sign ADP requests/telephone requests in each service unit. The list of authorized signatures is kept by ITS Hotline staff, and requests received without the correct authority will be returned to the service unit liaison for clarification and prioritization. The "authorized signature" list is updated by memo from the service unit liaison to ITS.

4.1. ADP Requests

There are three types of ADP requests: 1) ADP Problem Report (form LW 1/65a rev 3/90); 2) ADP Service Request (form LW 1/65 rev 3/90); 3) ADP Systems Request (form LW 1/65b rev 3/90). Send all ADP requests to the ITS Hotline, or place the request in the ITS Hotline bin in LM-G02.

4.1.1. ADP Problem Report (LW 1/65a rev 3/90)

A problem is defined as an occurrence when something doesn't work properly during a terminal session; it may be associated either with the equipment or with the application you are using. Another example of a problem is a printed copy which has errors in it, or the printed copy did not appear in your bin as it should have. Some problems require substantial analysis and work before they can be solved.

See the section of this guide titled "ITS Hotline". If the problem and how to solve it are not included in that section, you should contact the ITS Hotline by one of the following methods:

- a. If it is of an immediate nature to your work, i.e., you are unable to perform your job because the equipment you are using has malfunctioned, call 7-7727. See Section 2 for information needed before calling the Hotline.
- b. Problems not of an immediate nature, i.e., something that is a recurring thing and should be brought to someone's attention, should be submitted to the Hotline on form LW 1/65a (rev 3/90); this will allow ITS to analyze the situation to determine whether or not there are other individuals having the same problem and how far-reaching it may be.

NOTE: Check with your service unit liaison for procedures internal to the service unit.

ADP Problem Reports should not to be used to ask for new features of existing systems, or to state that your job would be easier if you had a different management report. This type of request is an ADP Systems Request.

4.1.2. ADP Service Request (LW 1/65 rev 3/90)

Requests for automation services, such as installing or relocating hardware, scheduling computer jobs, and accessing various computer systems, should be submitted to ITS/Hotline on an ADP Service Request. Use the ADP Service Request form for non-dialup connections such as 3270-type terminal or token ring.

NOTE: Check with your service unit liaison for procedures internal to the service unit.

4.1.2.1. Access to EMAIL

Information required for opening an EMAIL account includes:

- Full name of requestor; e.g., Joseph X. Gibbs.
- Desired "alias"; e.g., Gibbsey.
- User contact: person making the request to an automation liaison who will sign the request and forward it to ITS.
- Phone: telephone number of the user contact.

4.1.2.2. To Obtain A ROSCOE Account

To obtain a ROSCOE Account, check the box (on form LW 1/65) marked *ROSCOE* as well as the box marked *ACCESS TO OTHER* and indicate *ACF2*. Information required for opening a ROSCOE account includes:

- Full name of requestor; e.g., Joseph X. Gibbs.
- Service Unit/Division/Section; e.g., LMS/ITS/Sys Int.
- User contact: person making the request to an automation liaison who will sign the request and forward it to ITS.
- Phone: telephone number of the user contact.

Access to this facility is limited to those having a demonstrated need.

4.1.2.3. Access to MUMS, SCORPIO, or Other Application

Information required to gain access to one of the databases (in the case of MUMS, this is for "search only" access):

- Full name of requestor; e.g., Joseph X. Gibbs.
- Location of requestor's terminal; e.g., LM G51.
- Terminal ID.
- Specific files needed.

4.1.2.4. Access to Other

In order to obtain access to ROSCOE or certain CICS applications such as ACQUIRE, RPX, and TSO, check the box marked *Access to Other* (on form LW 1/65) and indicate *ACF2*.

Information required to gain access to ROSCOE or certain CICS applications:

- Full name of requestor; e.g., Joseph X. Gibbs.
- Requestor's Service Unit/Division/Section; e.g., CRS/OPS/AU
- Phone: telephone number of the user contact.

4.1.2.5. Schedule a Computer Job

Information required to schedule a special computer job, already in production, to be run on demand (one that is not part of a routinely scheduled procedure, e.g., once a year statistics) includes:

- Job name.
- Job number.
- When needed.
- Special parameters required.

4.1.2.6. Install New, Approved Hardware

Hardware requests are approved in the budget process for every fiscal year. Once the hardware has been delivered to the loading dock, ITS will schedule the installation based on the completed *Request for ADP Service* form (LW 1/65 rev. 3/90):

- Type of equipment; e.g., IBM pc and printer.
- Location; e.g., LM G51.
- Date hardware was approved.
- User contact: person making the request to an automation liaison who will sign the request and forward it to ITS.
- Phone: telephone number of user contact.
- Copy of ADP Workstation Request.
- Site map.

4.1.2.7. Replace Old/Upgrade Existing/Remove Hardware

Information required to replace old hardware includes:

- Type of equipment; e.g., printer, pc, NTI terminal, etc.
- Location; e.g., LM G51.
- Site map.

4.1.2.8. Relocate Hardware

Information required to relocate hardware includes:

- Type of equipment; e.g., printer, pc, CompuCorp.
- Location FROM; e.g., LM G51.
- Location TO; e.g., LM G45.
- Site map.

4.1.2.9. Request for Local Area Network Services

ITS is pursuing a program which will allow for the provision of a local area network (LAN) connection anywhere in the Library. This network service is being provided through the use of token ring equipment and software over installed twisted pair telephone wire.

Network connections of this type can allow for high-speed connection to mainframe systems, local shared resources (e.g. printers and storage devices), and wide area network services such as the INTERNET.

Once a substantial deployment of this network is complete it will be possible for individual users to request LAN connections in the same manner as requests for 3270 terminals or telephones are handled currently. At present LANs are being designed and installed in large blocks of workstations. In general, requests for these installations are being developed by the Service Unit automation liaison groups in consultation with ITS technical staff.

4.1.2.10. Other

For services which do not fall into any of the preprinted categories, check OTHER and give as exact a description as possible of the requested service.

For example, to request an organization entry change to the LC Telephone Directory, check OTHER, indicate *LC Telephone Directory (MONIES)* and attach copies of the specific directory page(s) with indicated changes.

NOTE: ITS does not handle changes to personal name entry which are made via the *Library of Congress Employee Address Record* (LW 6/73 rev 8/92)

4.1.3. ADP Systems Request (LW 1/65b rev 3/90)

Requests for new work on an existing production system must be submitted on form LW 1/65b (rev 3/90). These requests may be the result of conversations and meetings between managers of a service unit and ITS; form LW 1/65b (rev 3/90) is the request form needed to ensure proper assignment and tracking of the project inside ITS.

NOTE: Check with your service unit liaison for procedures internal to the service unit.

A request is evaluated for its priority in the Library's strategic plan, the priority in the requesting service unit, the resources involved (both ITS and other LC staff), the benefits to be derived for the Library, and the negative impact to the Library (or a specific service unit) if a request is denied.

4.2. Telecommunications Telephone Service Requests (LW 1/73 rev 12/93)

The Telecommunications Telephone Service Request (TTSR), LW 1/73 rev 12/93 is a three-part form used to request telephone or dialup data service. The TTSR form can be used to request additions, moves, changes and removal of equipment. A copy of the TTSR form is found in the Appendix.

4.2.1. Top Section

All fields should be filled in with the following exceptions:

- Work I.D. Number will be filled in by the Hotline staff
- Telephone Number is only for moves, changes and deletions, leave this space blank for additions and the number will be assigned by ITS staff.

Make sure that your departmental approving officer signs and dates the form.

Fill out the section on "WORK LOCATION" showing Library Division or Section, Building, Room number and other phone numbers if applicable.

4.2.2. A ACTION REQUESTED

Fill in the appropriate boxes as described below. Except when installing a new line, only 1 box in section A should be checked. Submit separate requests for separate work items.

Use the "Add New Line" for adding a new voice line or Fax . Use the "Relocate" for moving an existing station to an alternate location. The "Swap" option exchanges the location of two stations.

4.2.3. B PHONE SET DESCRIPTION

For single line Analog sets, chose one of three options from the list of available equipment. For Multi-Button Digital sets attach a layout with form showing the desired features. A list of abbreviations is provided in this section.

For staff members without access to the network, Data lines may be installed for telecommunications connections via Modem. Provide additional information on the Data line in section E.

4.2.4. C FEATURES NEEDED

For any additions or changes to the existing features, fill out this section.

For "abbreviated dial" (speed dial) include the extension number of another phone which already uses the speed dial list to which you want access.

4.2.5. D DIALING CAPABILITY (RESTRICTION)

Please use this section to indicate the dialing capabilities/restrictions to be provided for requested lines. Check "ADD" to request expansion of dialing services. Check "CHANGE" to request an alternate class of service (choose from the list provided below).

Check a box which corresponds with the desired level of capability as defined below. Please note that since the choices are listed left to right from most restricted to least restricted, each box includes the capabilities of the boxes listed to the left. For example, phones capable of making long distance call can also place local calls and calls throughout the Library. Call the Hotline to request further restrictions within each category (e.g., long distance calls during business hours only).

Library Calls Only	Calls may be placed only to stations with the Library;
Local Calls	Calls may be placed to stations in the 202, 703, and 301 area codes, provided they do not incur long distance charges (the Library's telephone switch is able to determine this);
Long Distance Calls	Calls may be placed to stations within the domestic long distance telephone system (including all points in the U.S., Canada and Mexico);
Totally Unrestricted	Calls may be placed to any station in the world.
Other	Describe in Section E Comments

4.2.6. E COMMENTS

Use this section to provide any other pertinent information as well as to request "Automated Attendant Systems" or "Call Management System ACD groups."

4.3. Teleconferencing Quorum

A local, national or international conference call between two or more parties can be made via the Teleconferencing Quorum feature of the System 85.

To request this service, call the LC Operator (0) and provide the following information:

1. Your name
2. Designated date and time of conference call
3. Number of parties who will be on the line
4. Expected duration of call

The Communications Unit will then provide a phone number which may be given to all parties who will be participating in the conference call. The contact person may furnish this number to all parties and request that they dial the number at the designated time in order to take part in the conference call. In this case, all parties will be billed separately. However, if the Library of Congress will be paying for the call, then the contact person at LC may dial each party and then transfer the call to the number provided by the Communications Unit.

4.4. Requests for Telephone Books/LC Directory

Single copies or complete sets of local white and yellow page phone books, and the Library of Congress Telephone Directory can be obtained from the Communications Unit, LM SB-14, daily between the hours of 9:00 a.m. and 3:00 p.m. Currently a complete set of local phone books consists of the white and yellow pages for Prince Georges County, Montgomery County, Northern Virginia, and the District of Columbia. Large numbers of phone books, including the LC Directory, and the accompanying binder, must be requested directly from the Supply Unit, C&L via a standard Requisition form.

4.5. Status of Requests: Reports from ITS

The Hotline is the log-in point for requests to ITS, whether by telephone or in writing. Staff in the Hotline are not expected to know the status of individual requests (there may be 200 or more at any one time) or about the status of development projects currently underway in ITS. They are responsible for the production systems only, including the equipment used throughout the Library, and for the logging in and forwarding of each request to the appropriate area in ITS.

ITS sends a weekly printed status report of all Problem Reports, Service Requests, and Telephone Requests to one representative in each service unit (either the automation liaison or an alternate). Each service unit liaison or alternate should communicate relevant information to the service unit's end users. The ITS liaisons also receive a copy of the status report in order to coordinate between ITS and the service units.

Some ADP Systems Requests are also contained in this report; i.e., if the work requested is for a modification to an existing production system in order to correct a problematic situation, the work will be performed by the appropriate staff in ITS. If the work does not involve a modification, but rather fulfills a new requirement, the request will be transferred to the Office of the Director, ITS, for review and disposition.

The status report is divided into two parts: 1) the requests which have been closed in the past 10 days, and 2) the requests which are currently open. There is a brief description of the request; the location in ITS where the request is assigned; date fields for when the request was reported, scheduled start of work, and closure of the request. As the work initiated by a request moves from one part of ITS to another, the status report is updated on-line.

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SECTION 5. SUBMITTING JOBS TO THE ITS MAINFRAME

5.1. When Jobs May Be Submitted

Jobs may be submitted to the ITS mainframe Monday through Friday, 6:30 a.m. to 6:00 p.m. Initiators are not available on weekends unless a special request has been submitted to the Computer Operations Group Leader or either Group Leader of the Production Systems Groups.

5.2. Job Classes

One of the following classifications is required to submit a job; use of the incorrect one will result in cancellation of the job.

Class A (Test): Use this class for test jobs which require one tape drive and will run for less than 30 minutes wall time. Jobs exceeding 30 minutes wall time will be cancelled.

Class B (Test): This class is the same as Class A except that two or more tape drives may be used in any one job step.

Class E (Test): Use this class for test jobs which must be run while TP is down.

Class G (Test): Use this class for all test jobs which will run for over 30 minutes.

Class K (Test): Use this class for all test jobs which require no tape drives and will run for less than 30 minutes wall time. Jobs exceeding 30 minutes wall time will be cancelled.

5.3. Print Output

The standard output printer in the ITS Computer Center is a Xerox 9700. Print output directed to the 9700 may not exceed 150,000 lines. Any job larger than 150,000 lines must be scheduled with the Computer Operations Group Leader.

Print jobs directed to the impact printers must be spooled to tape for printing. Both the word "SPOOL" and the proper form number must make up the DSN. A spooled job must be scheduled before 9:30 a.m. of the day it is to be run; a call to the ITS Hotline can initiate the scheduling of a spooled job.

To use outside tapes, schedule the job in the OVER-THE-COUNTER tape log which is located in the computer room entrance. Place the tape or tapes in the rack provided.

ITS does not print 3x5 cards; if this is a requirement, CDS is involved for the printing. This can be accomplished in one of two ways:

1. Direct the output to tape and deliver the tape to CDS.
 - a. Schedule the job in the OVER-THE-COUNTER tape log.
 - b. Use TAPE=MAXI to get a non-ITS tape.
 - c. Provide label information.
2. Electronically transfer data to CDS as part of a job; to do this, contact CDS to determine location information (where to direct the output).

SECTION 6. PRINTED COMPUTER OUTPUT

The ITS Computer Operations Service Center is an area which is secured from the daily traffic of LC staff and visitors. Security of equipment and software is of extreme importance to the Library and all users of the automated systems. There are regulations concerning security of government computer installations, and the Library is subject to those regulations. The security measures mean that no one is allowed in the computer room without specific authorization (this includes the staff of ITS). Staff from the Hotline may be reached by telephone (7-7727).

Printed output from the ITS mainframe is distributed in two ways:

1. non-production jobs are placed in numbered bins by the staff of Computer Operations; each bin has a lock which can be opened by entering a code on the available number pad.
2. production jobs are placed in bins which are secured inside the locked room; there is a bell next to the window (in case someone is not sitting right inside); each production job is written in a log, and you will be asked to sign for the output before it is released to you.

If there is a problem with the output, such as incomplete or non-readable output, call the ITS Hotline at 7-7727 with specific information such as job number, date and time it was submitted.

To get a bin assignment, contact the automation liaison in your service unit; the liaison will contact the proper person in the ITS Computer Service Center. You may also ask in person at the ITS/CO pick-up window, inside LM

SECTION 7. THE AUTOMATION LIAISON NETWORK

There is one or more person in each of the Library's service units who is the Automation Liaison with ITS. The service unit liaisons are considered the initial contact for information provided by ITS to the Library staff. They are also the contacts for ITS liaisons to seek information about issues in the service units. Automation liaisons are authorized to sign ADP requests and advise service unit staff on internal procedures involving automation.

7.1. Service Unit Liaison Networks

Some service units have their own networks of automation liaisons who are responsible for a variety of tasks, one of the most important of which is to disseminate information to a specific unit of staff within the larger service unit/division. In some service units the duty of automation liaison is rotated among all members of a unit. Training within their own unit or section is part of the role of many of the division automation liaisons.

7.2. Liaison Communication

The service unit's automation liaison and the ITS liaison work together on general interest items between their two organizations, and the communication between the two extends to include other service units and as many staff representatives as are needed to discuss issues in preparation for the managers' meeting. Monthly managers' meetings are held between ITS and a service unit in which issues concerning information systems planning and development are discussed, including priorities and resources. Agendas are created jointly by ITS and the service units.

The service unit automation liaison communicates directly with ITS' production and development managers and project leaders concerning problems/questions about specific projects or requests. User Support Group management conducts a monthly meeting with the automation liaison from each Service Unit to discuss support issues such as: procurement of workstations, network installations, major moves, Banyan server support and telephone service requests.

7.3. Automation Liaisons

The current service unit and ITS automation liaisons (and their phone numbers) are listed below; alternate ITS liaisons are indicated by the name in parentheses. They may also be contacted by EMail.

SERVICE UNITS

Office of the Librarian

Michael Shelley
7-6367

Financial Services Directorate

Jamie McCullough	Michael Pham
7-4160	7-3987

Collections Services

Glenn Zimmerman
7-5330

Congressional Services

Jeffrey C. Griffith
7-2475

Constituent Services

Maurice Sanders	Bob Palian
7-1585	7-1576

Copyright Services

Michael D. Burke
7-8370

Cultural Affairs

Roberta A. Steven
7-1550

Human Resources

Lloyd Pauls
7-5659

Law Library

Nick Kozura
7-6425

NLS/BPH

Bob McDermott
7-9313

SECTION 8. Information Center Services

The Information Center (IC) is the part of ITS that provides software support and consultation to the Library personal computer and network user community.

8.1. Services Provided

8.1.1. User Consultation and Requirements Analysis

IC staff work with users to address various topics such as:

- Determination of office automation needs
- Identification and procurement of appropriate equipment and software
- Personnel training recommendations
- Equipment, software and network use or problems
- New technology opportunities

8.1.2. Software Demonstrations, Evaluation, and Testing

- Word Processors
- Database Management
- Communications
- Spreadsheets
- Utilities
- Workgroup Software
- Security and Antivirus
- Desktop Publishing
- Backup Software
- Scanning software
- Network software

8.1.3. End-user Software and Network Support

The Information Center assists Service Units in the area of specification, configuration, installation, training, testing, troubleshooting and long-term planning for end-user operating system software, network software and communications software. Software currently supported includes MS-DOS, System 7 for the Macintosh, OS/2, TCP/IP communications software, WordPerfect, Procomm Plus, Attachmate, and the Banyan VINES network operating system for local area networks.

8.1.4. Coordination of User Groups

Several groups are coordinated by the IC, and seminars are also available to these groups where specific needs have been identified:

- Macintosh Users Group
- Banyan Users Group
- Bibliographic Software (ProCite) Users Group

8.2. IC Training Program

8.2.1. Requests for Training

A schedule of IC classes and demonstrations is available in the IC and is also published in *The Gazette* and in the Library Staff Training and Development Office Catalog. Library employees requiring special accommodations should contact the IC staff for additional information. Various self-paced training programs are available and are scheduled and coordinated by the IC staff. Users are requested to contact the IC to request scheduling for specific sessions. Courses are scheduled when sufficient numbers of employees have indicated interest in the same class. Prospective trainees will be notified of class date, time, and location well in advance of the actual training date.

8.2.2. Classes Offered

Classes routinely taught by the IC staff include:

- Computer Literacy
- DOS Operating System
- WordPerfect
- Spreadsheets
- Paradox
- Harvard Graphics
- Procomm+
- Macintosh topics
- Communications (TCP/IP and the Internet)
- Banyan Basics
- Laser Printer Usage

8.3. Information Center Facility

The physical facility has a variety of workstations (both MS-DOS, OS/2, and Macintosh) equipped with different software (Mac, 80286, 80386, and PS/2 microcomputers). Other equipment such as scanners, CD-ROM, local area network stations, and laser printers are also available for use. Over 30 software products are available for user testing and evaluation. Reproduction of any of the software programs available in this library is strictly prohibited.

The IC facility is available to Library employees from 8:00 a.m. to 5:00 p.m. Monday through Friday, except holidays. Extended operating hours can be arranged on an individual basis by contacting the IC staff. Problem reporting should be done through the ITS Hotline, 7-7727; problems are logged and routed by the Hotline staff.

SECTION 9. TECHNOLOGY ASSESSMENT LABORATORY

The purpose of the Technology Assessment Lab is to conduct in-depth studies in information technology's constantly growing and changing hardware and software architectures, programming languages, and systems analysis tools and practices. The Technology Assessment Lab works with vendors and universities to research advanced technologies for the purpose of solving library problems.

Though frequently upgraded, typical equipment on hand includes:

- scanners
- digital cameras
- color printers
- optical character recognition devices
- video capture and playback
- video teleconferencing
- latest versions of PC hardware and operating software
- technologies to assist the disabled, including voice recognition, voice synthesis, Braille printers and displays

9.1. Services Provided

9.1.1. Technical Briefings

The Technology Assessment Laboratory periodically sponsors technical briefings (e.g., Joint Technology Days with various vendors) on a variety of topics in the field of information technology. Some briefings are designed to interest a broad audience while others are planned with a highly specialized, technical audience in mind. Topics of broad appeal are publicized via email, the *LC Gazette* or on flyers posted throughout the Library. In order to be notified of highly technical presentations, contact the Technology Assessment Lab at 7-9628.

9.1.2. Requests for Advanced Technical Research and Development

If you have a library problem in need of an advanced technical solution (beyond current standard technology) send a detailed description of the problem to the Technology Assessment Lab (Mailstop Code 9304), via your automation liaison.

9.1.3. Hands-on Demonstrations and Testing

LC staff members may request hands-on demonstrations of the equipment located in the Technology Assessment Lab. Testing of hardware and software is available on a short term basis. Various scanners are available for digital preservation and conversion of collection items. Contact The Technology Assessment Lab at 7-9628.

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SECTION 10. INTERNET

10.1. Internet Overview

The Internet is a hierarchy of local, regional, national, and international data communication networks interconnected to form a single network. The Internet is used for communication, research collaboration, resource sharing, and remote database access among education and research institutions, government organizations, and commercial entities.

10.2. Internet Services

The three standard Internet services are electronic mail, file transfer, and remote database access.

10.2.1. Electronic Mail

Internet mail affords both the ability to communicate internationally and to participate in electronic discussion forums or "listservs." Internet mail access is supported at the Library by CA-eMAIL+ and SoftSwitch. SoftSwitch makes Internet electronic mail available to any LC staff member with a CA-eMAIL+ account. Any staff member not having a CA-eMAIL+ account can request one by submitting an ADP Service Request to the Service Unit Automation Liaison.

CA-eMail+ users can get Softswitch accounts by performing the following procedures:

1. Create a CA-eMail+ message containing the following text:

find lastname=your last name
(e.g., *find lastname=Jones*)

2. Enter any text in the subject field

3. Send the message as follows:

send to ssw.query at switch

Within a few minutes, SoftSwitch will send an email response to the user's CA-eMail+ Inbox, verifying the SoftSwitch auto-registration.

The Library of Congress also supports the Listserv application which makes use of the capabilities of Internet mail. This application supports forums and the publication of electronic journals. To find out what forums are available at the Library of Congress send an email message to "listserv@sun7.loc.gov" which contains the term "lists" in the mail message.

10.2.2. File Transfer

The File Transfer Protocol (FTP) allows a user to login and transfer files from one Internet-connected computer to another. Many sites offer "anonymous" FTP server access. The Library of Congress anonymous FTP site address is "ftp.loc.gov".

10.2.3. Remote Database Access

Telnet is the standard Internet application which allows remote database access. Remote database access allows a user with Internet connectivity (the local host) to sign onto and use an application on another Internet-connected (remote) host.

10.2.3.1. LOCIS

Telnet access to the Library of Congress's Information System (LOCIS) is available. The Internet address for connecting to LOCIS is "locis.loc.gov".

10.2.3.2. LC MARVEL

The Library of Congress's Campus-wide Information System (CWIS), LC MARVEL (Machine-Assisted Realization of the Virtual Electronic Library), is also available via telnet. The Internet address for connecting to LC MARVEL is "marvel.loc.gov."

10.2.4. Future Services

Two new Internet services are in prototype at the Library. They are USENET and the World-Wide Web.

10.2.4.1. USENET

USENET is a collection of discussion or newsgroups from around the world. Newsgroups must be selected by the user and read through newsreader software. Most newsreaders allow topical areas of interest to be read to the exclusion of other topics covered by the selected newsgroup. Unlike Listserv forums, messages are stored centrally rather than in individual accounts.

The preferable methods of reading USENET newsgroups is through client software. Client software may be ftp'd from ftp.loc.gov and installed on the client machine. The news server address is "news.loc.gov." Those having RS8 accounts can use the courtesy client software available on that machine. This software can be started by entering "trn" at the UNIX prompt. USENET use is limited to Library staff.

10.2.4.2. World-Wide Web

The World-Wide Web (Web, WWW, or W3) is a wide-area information service developed at CERN, the European Particle Physics Laboratory. WWW consists of a body of software and a set of protocols and conventions which allow a searcher to navigate the Internet using hypertext technology. Hypertext is a method of presenting information in such a way that selected words in the text can be *expanded* at any time to provide other information about the word. These words act as *links* to other documents which may be text, files, pictures, or sound.

The WWW will be used by the Library initially for exhibits and the distribution of selected portions of the American Memory project. Other more textual projects, such as a library of Internet resources, are also being investigated.

10.3. Internet Connectivity

Various methods of accessing Internet are explained in Special Announcement No. 93-27A, *Policy Guidelines on the Appropriate Use of and Access to the Internet* (See Appendix E).

10.3.1. Mainframe Access

Users having mainframe terminals can have the three standard Internet applications of email, FTP, and telnet available to them given the following: email is available to anyone having or requesting a CA-eMAIL+ account; telnet is available given proper security and the Telnet option on the TPX screen. Users having mainframe terminals without Internet access can request access by submitting an ADP Service Request to the Service Unit Automation Liaison.

10.3.2. Server Access

A small number of Library staff have server accounts on the Sequent computer. All Sequent accounts are being moved to the new RS6000 named RS8. Upon completion of all application and account moves, the Sequent server will be retired. Requests for new accounts on the RS8 are currently being accepted. Users can request a server account by submitting an ADP Service Request to the Service Unit Automation Liaison. Those with server accounts have the standard applications of email, FTP, and telnet available to them.

10.3.3. LAN-Attached PCs

More than 3,500 PCs have LAN connectivity throughout the Library of Congress and on Capitol Hill.

10.3.3.1. Running DOS TCP/IP

Those with LAN-attached PCs running DOS TCP/IP have Telnet, FTP, USENET and World Wide Web available. Email is available either through CA-eMAIL+ or a server account.

10.3.3.2. Running OS2 TCP/IP

Staff members with LAN-attached PCs running OS2 have the same applications available as DOS, with the addition of the email application which is made available on an OS2 machine through the LaMail application.

10.3.4. Dial-up Access

Users with a PC, modem, and a telecommunications package such as ProComm have dial-up access to both the mainframe and the Sequent server. All capabilities listed under 10.3.1 and 10.3.2 are available if security and Telnet access permissions are appropriately defined.

10.3.5. Data General Access

Staff with Data General terminals have the potential for use of the standard applications of telnet and FTP.

10.3.6. Macintosh Access

Users with Macintosh computers which are connected to the LAN and which have TCP/IP software have the standard applications of telnet, FTP, and mail.

10.4. The Internet Users Group

10.4.1. Organization

The Internet Users Group (IUG) is an official organization associated with the Online Users Group. The Group is guided by a committee containing representatives from the Library's Service Units. Meetings are announced in "The Gazette" and by CA-eMAIL+ bulletins.

A CA-eMAIL+ network is available for communicating electronically with the IUG. To send a message to the IUG, enter "send IUG(ALL)."

10.4.2. Document Directory

The IUG sponsors an FTP directory which contains documents useful to both the novice and experienced Internet user.

For DOS users, the following steps will provide the new IUG FTP user with an index to the documents contained in the directory.

1. From a PC's TCP directory enter;

 "ibmtr"
 "ftp ftp.loc.gov"
2. Login to the system using the account "anonymous."
3. Enter the first letter of your first name and the first three letters of your last name as a password: John Doe would enter "jdoe."
4. Change to the IUG directory by entering "cd /pub/iug."
5. To offload a document, enter "get new.users.guide." A file name for the PC version of the file may be given explicitly, or the default of "new.use" may be used. (NOTE: the truncation results from differences in naming of files between UNIX and DOS).

Other useful documents available from the IUG FTP directory include

- ftp.dos.info.wp51
- hitchhikers.guide

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APPENDIX A: GLOSSARY

The terms defined below should help you to communicate with a member of the Hotline staff.

ACF2	The security extension to the IBM Operating System which provides protection for data and resources on the computer system from unauthorized destruction, modification, or disclosure.
APPLICATION	A specific use of a computer which is accomplished via a set of computer programs, e.g., acquisition of materials, circulation control, payroll, etc. Contrast <i>FACILITIES</i> .
AUTOMATION LIAISON	A designated employee in charge of automation equipment and requests for a specific office or division.
BUFFER	Memory reserved to hold something temporarily. Contrast with <i>PRINTER BUFFER</i> .
CICS	(Customer Information Control System). A TeleProcessing (TP) monitor from IBM that is used by LC to handle/support mainframe online capabilities.
CLIENT/SERVER	In a communications network, the <i>CLIENT</i> is the requesting machine and the <i>SERVER</i> is the supplying machine.
CONTRAST	The focus control of a terminal.
CONTROLLER	A hardware <i>DEVICE</i> which, upon signal from the CPU, performs the physical data transfer between memory and a peripheral device such as a disk or display terminal.
CRT	(Cathode Ray Tube). The vacuum tube used as a display screen in a video terminal or television set. CRT is used synonymously with terminal, which includes the keyboard.
DATA RATE	The speed of data transmission within a computer or communications network.
DEVICE	Any electronic or electromechanical machine or component. Term is synonymous with <i>HARDWARE</i> .
DISK DRIVE	A peripheral storage device that holds, spins, reads, and writes magnetic or optical disks. The disk drive may be a receptacle for disk cartridges or disk packs, or it may contain non-removable disk platters like most hard disks in personal computers.
DOWNLOAD	The transmission of data, typically an entire file, from a central computer to a remote computer, or from a file server to a personal computer. Contrast with <i>UPLOAD</i> .

EXPIRED PASSWORD	Message received when a user's <i>PASSWORD</i> has been in effect for 180 days; the system will disallow any logon or job submission until a new password is supplied by the user. The ability to assign a new password on a sign-on screen does not expire at any time. A password can be from 1 to 8 characters, and a new password cannot equal the user's current password.
FACILITIES	At LC, this term is sometimes used to refer to a sub-set of <i>APPLICATIONS</i> which are of a generic nature rather than business specific. For example: <i>LOGIC LIBRARY</i> and <i>MUMS</i> are frequently called <i>FACILITIES</i> , while <i>SCORPIO</i> and <i>BOOKS</i> are <i>APPLICATIONS</i> using those <i>FACILITIES</i> .
FILE	A collection of a group of records.
GOPHER	Software available from University of Minnesota designed to facilitate access to information via <i>INTERNET</i> .
HARDWARE	Machinery or equipment, such as a CPU, video terminal, disk drive, and printer. Contrast with <i>SOFTWARE</i> .
INTENSITY	The brightness control of a monitor.
INTERNET	An electronic network of computers throughout the world providing communication and resource sharing services to students, scholars, librarians, researchers, as well as the general public. The three primary staff uses of <i>INTERNET</i> are electronic mail and discussion groups (<i>MAIL</i>), accessing remote computers (<i>TELNET</i>), and transferring files (<i>FTP</i> --File Transfer Protocol).
LC MARVEL	(Library of Congress Machine-Assisted Realization of the Virtual Electronic Library). An LC application available on <i>INTERNET</i> using <i>GOPHER</i> software to allow a user access to the Library's collection of information.
LOCAL PRINTER	A printer physically connected to a personal computer; it is typically identified as LPT 1 to that personal computer. Contrast with <i>REMOTE PRINTER</i> .
LOG-ON/LOG-OFF	Making/breaking a connection between a user and the computer. The <i>LOG-ON</i> process requires a user to sign in and identify himself/herself using a <i>LOGONID</i> . Contrast <i>SIGN-ON/SIGN-OFF</i> .
LOGONID	Sometimes called "Operator ID" or "User Key," this is a set of characters predefined to the computer system to identify a specific user. At the time of <i>LOG-ON</i> , an individual enters his <i>LOGONID</i> and a <i>PASSWORD</i> . On the LC mainframe computer system, the <i>LOGONID</i> is interrogated by ACF2 to determine if the user is known to the system. Contrast <i>SIGN-ON</i> .

MODEM	Device that adapts a terminal or computer to a communications network. In order to have a personal computer dial up and communicate with another computer, the personal computer must have a serial port available into which the modem is connected, and a communications program must be used to direct the personal computer to do the transmitting and receiving.
MONITOR	The display screen of a terminal.
PASSWORD	A unique string of characters (8 maximum) entered by the user which is checked by security software to verify that the user is "who he says he/she is." It may also be used to verify that the user may access a specific application, or may perform specific functions within an application. (SEE <i>EXPIRED PASSWORD</i>).
PC	(Personal Computer). A computer designed for individual use. It is functionally identical to a larger computer that serves multiple users and has greater storage capacity.
PERIPHERAL	Any device connected to a computer, such as a monitor, keyboard, printer, disk drive, tape drive, scanner, or mouse.
PRINTER BUFFER	A memory device that accepts printer output from one or more computers and transmits it to a printer.
REGION (CICS)	A sub-division of <i>CICS</i> . Each sub-division controls a different set of online applications. For example, the PR01 region handles Production MUMS input/update applications. Types of regions: Production, Assurance, Test.
REMOTE PRINTER	A printer that is part of a communications network to which one or more computers may direct printed output. Contrast <i>LOCAL PRINTER</i> .
RESET	A key or button used to change a device back to its normal setting.
ROSCOE	An online program development system used extensively by application and development programmers in ITS.
SERVER	See <i>CLIENT/SERVER</i> .
SIGN-ON/SIGN-OFF	In general, same as <i>LOG-ON/LOG-OFF</i> . At LC, is frequently used to refer to making/breaking a connection between a user and a specific application; this is subsequent to the initial connection of the user to computer. The <i>SIGN-ON</i> process involves initiating a transaction which causes an application to begin. This process may or may not require a specific <i>SIGNONID</i> and <i>PASSWORD</i> .

SIGNONID	In general, same as <i>LOGONID</i> . At LC, is frequently used to refer to a set of characters predefined to the computer system to identify a specific user to a specific application. At the time of <i>SIGN-ON</i> , an individual initiates a transaction that causes an application to begin, and, if required a specific <i>SIGNONID</i> . A <i>PASSWORD</i> may also be required.
SNA	(Systems Network Architecture). This is IBM's network architecture for its mainframe communications network.
SOFTWARE	A set of instructions that tell the computer what to do. Contrast with <i>HARDWARE</i> .
STATUS LINE	A line on a <i>MONITOR</i> , usually at the very top or the very bottom, used by <i>SOFTWARE</i> to indicate whether or not a <i>TRANSACTION</i> is actively being processed.
TERMINAL	An input/out device for a computer that usually has a keyboard for input and a video screen and/or printer for output.
TERMINAL ID	A four-character alphanumeric identifier found on a label affixed to the front, top corner of the computer memory component of each workstation at LC. This identifier is required information whenever a user is reporting a hardware problem to the ITS Hotline.
TOKEN RING	A personal computer local area network (LAN) which may provide a communications link to local shared resources (e.g., laser printer or hard disk) or to remote processors such as the ITS mainframes.
TPX	(Terminal Productivity Executive). This is a <i>VTAM</i> session manager. The primary function of TPX is to enable easy switching between applications, such as between <i>ROSCOE</i> and <i>CICS</i> .
TRANSACTION	Any request that is entered into the computer system. Requests may cause a read of data, and/or a change or deletion of data.
UPLOAD	The transmission of data, typically an entire file, from a personal computer or workstation to a central computer or file server. Contrast with <i>DOWNLOAD</i> .
VTAM	(Virtual Telecommunications Access Method). This is an IBM communications program which controls communication and flow of data in an <i>SNA</i> network.
WORKSTATION	Term used in lieu of <i>TERMINAL</i> or <i>PC</i> .

APPENDIX B: ITS ORGANIZATIONAL STRUCTURE AND FUNCTIONS

MISSION STATEMENT

Information Technology Services (ITS) is responsible for the planning, analysis, design, development, and maintenance of software and hardware systems, telecommunications systems and services, and network architecture and software in support of the Library's mission and operations, using analysis, technology, methodology, and equipment which embodies the most up-to-date thinking and industry standards. ITS maintains a staff of professional computer systems analysts, programmers, communications specialists, communications engineers, computer technicians, and administrative personnel in order to carry out its work which is intrinsic to the successful accomplishment of the Library's mission.

The following staffs and technical groups make up Information Technology Services.

RESOURCES MANAGEMENT STAFF

The Resources Management Staff performs a wide variety of functions in support of the management and staff of Information Technology Services. These functions include the training program; ITS Library; coordinating and monitoring the ITS multi-year plan; budget development and management; technical writing; personnel records and performance evaluation system; administrative matters and activities; and assistance in two-way communication between ITS and Library service units, as well as between the Director's Office and ITS managers and staff.

DATA ADMINISTRATION STAFF

The Data Administration Staff is responsible for reviewing and assuring that logical data designs developed by ITS staff meet ITS standards for integrity, clarity, application of conventions, and maintainability. Data administration plays a prominent role in the long-range plans for development. The DA Staff manage and control data dictionaries, encyclopedias and/or repositories used to house logical data designs. The DA Staff work together with end users and ITS analysts and designers in identification and understanding of data as it relates to the development of data base systems.

TECHNOLOGY ASSESSMENT STAFF

The Technology Assessment Staff is responsible for performing in-depth studies in information technology's constantly growing and changing hardware and software architecture, programming, and analysis tools and practices. The TA Staff ensures that this information is organized and presented to ITS staff and managers. It accomplishes this by reviewing current literature and professional journals in pursuit of information which could be applicable to the various software development efforts, either active or under consideration, in the Library and ITS. The TA Staff contacts other government agencies and private industry to coordinate information briefings concerning software and its architecture as it is being developed.

SYSTEMS DEVELOPMENT GROUPS 1-4

There are multiple Systems Development Groups in ITS, each of which performs enterprise analysis, requirements analysis and project definition, project management, detailed systems analysis and design, and software development and testing as it is applied to individual projects in support of Library functions and procedures.

PRODUCTION SYSTEMS GROUPS 1-2

There are two Production Systems Groups in ITS which perform daily maintenance, are responsible for on-going control and reliability of all on-line and data base software used in production applications systems, re-engineer existing software, provide expertise in the software under their control, and serve as facilitators between groups using common software to ensure that redundancy is avoided.

SYSTEMS ENGINEERING GROUP

The Systems Engineering Group performs telecommunications and general systems planning and design, and systems programming tasks. This Group is responsible for ensuring that the Library's telecommunications and systems configuration are adequate to support the communications and data processing services planned by ITS. This Group is responsible for installing and maintaining the Library's telephone systems and instruments.

USER SUPPORT GROUP

The User Support Group is responsible for service to the users in response to requests to order, install, modify, or repair microcomputer hardware and software; to order, install, modify, or repair voice equipment and service; to restore service which has been disrupted. One of the central parts of this Group is the ITS Hotline which is usually the first point of contact with users who may be experiencing technical difficulties. This Group is also responsible for network administration, e.g., System 85, LAN, 3270, Data General and other Library Networks.

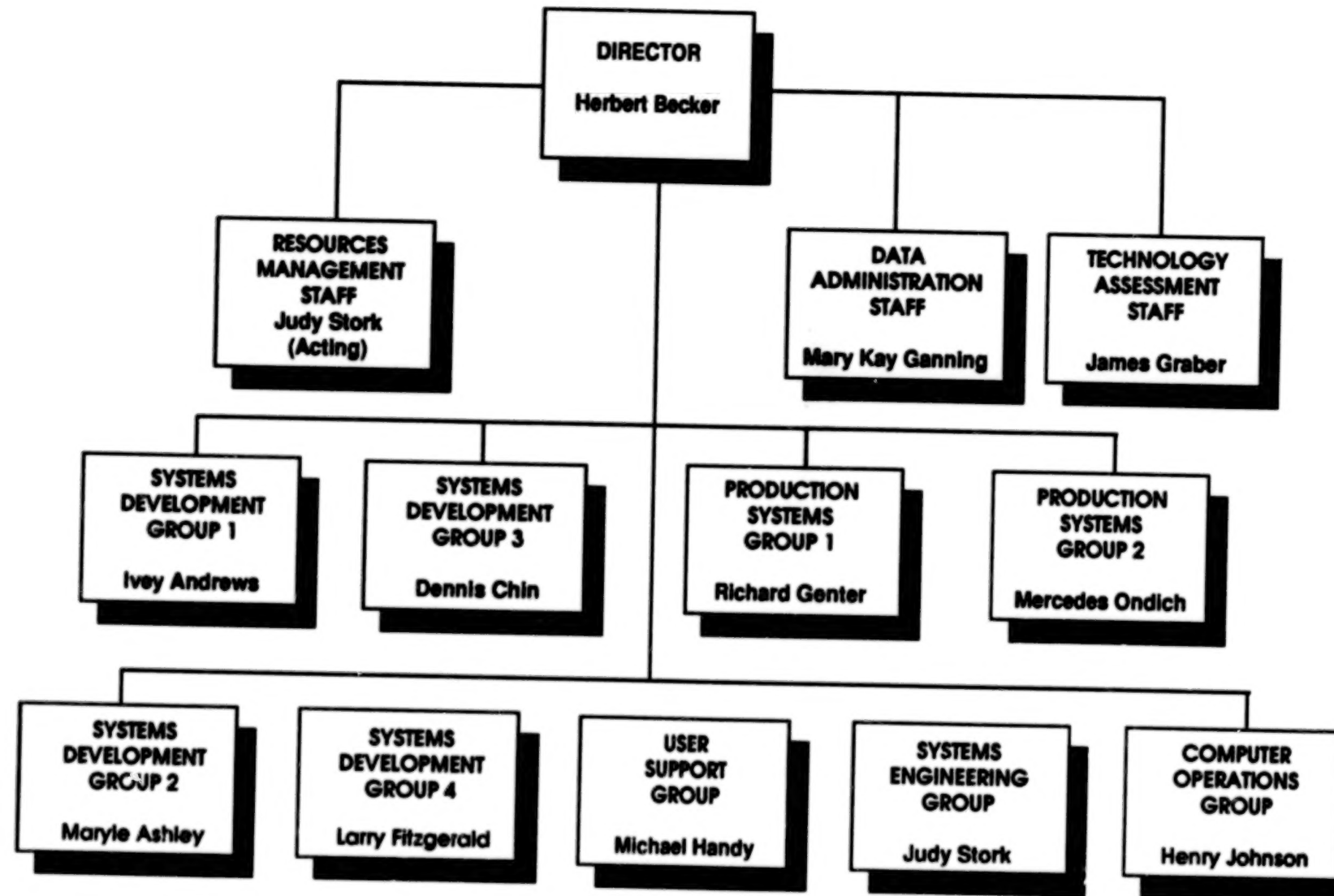
COMPUTER OPERATIONS GROUP

The Computer Operations Group is responsible for the operation and safeguarding of the Library's multi-million dollar computer facility which provides automated support to thousands of Library patrons and Capitol Hill employees in the Library and in Congressional offices who depend upon computer services to perform their daily work.

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INFORMATION TECHNOLOGY SERVICES MANAGEMENT TEAM



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ADP SERVICE REQUEST

To: Information Technology Services/Hotline	Date:	FOR ITS USE ONLY No.
Authorized Signature:		To:
For Requestor Use		
<div style="display: flex; justify-content: space-between;"><div style="width: 45%;">SERVICE REQUESTED (Check Only One): <div style="display: flex; flex-direction: column; gap: 5px;"><div><input type="checkbox"/> Access to EMAIL</div><div><input type="checkbox"/> Access to ROSCOE</div><div><input type="checkbox"/> Access to MUMS</div><div><input type="checkbox"/> Access to SCORPIO</div><div><input type="checkbox"/> Access to Other</div><div><input type="checkbox"/> Applications</div><div><input type="checkbox"/> Schedule a Computer Job</div></div></div><div style="width: 45%;">DATE REQUIRED: <div style="display: flex; flex-direction: column; gap: 5px;"><div><input type="checkbox"/> Install Approved Hardware *</div><div><input type="checkbox"/> Upgrade Existing Hardware *</div><div><input type="checkbox"/> Relocate Hardware</div><div><input type="checkbox"/> Remove Hardware</div><div><input type="checkbox"/> Replace Old Hardware *</div><div><input type="checkbox"/> Procure Software *</div><div><input type="checkbox"/> Other _____</div></div></div></div>		
SPECIFICATION: Provide information necessary to complete this request, such as location of equipment, job numbers and specific parameters for a requested job, location and ID of terminal.		
* Funding Office _____		
USER CONTACT:		PHONE:
For ITS Use		
<div style="display: flex; justify-content: space-between;"><div>Disapproved <input type="checkbox"/></div><div>Date:</div></div> <div style="margin-top: 10px;">Reason for disapproval:</div> <div style="height: 100px; border: 1px solid black; margin-top: 10px;"></div> <div style="margin-top: 10px;">Signature: _____</div>		

ADP PROBLEM REPORT

To: InformationTechnology Services/Hotline		Date:	FOR ITS USE ONLY
Authorized Signature:			No. To:
For Requestor Use			
Date of Occurrence:		Location:	
Description of Problem:			
User Contact:		Phone:	
For ITS Use			
Action Taken:			
Supervisor's Signature		Date	

ADP SYSTEMS REQUEST

To: Information Technology Services/Hotline		FOR ITS USE ONLY	
Authorized Signature: _____		No. _____	
Date: _____		To: _____	
For Requestor Use			
Library Users: _____			
Production system to which this request refers: _____			
Description of Request: _____			
Is this a new requirement? <input type="checkbox"/> YES <input type="checkbox"/> NO			
Justification of request (e.g., legislation, expected cost savings, measurement of increased productivity): _____			
User Contact: _____		Phone: _____	
For ITS Planning and Management Use			
Assigned to: _____		Date: _____	
Disapproved <input type="checkbox"/>		Date: _____	
Reason for disapproval: _____			
Signature _____			

Library of Congress

TELECOMMUNICATIONS TELEPHONE SERVICE REQUEST

Instructions: Submit a separate request for each change, except when like work actions are required on different phone numbers.

From: (Division/Section)		Date Submitted	Date Required	ITS USE ONLY Work I.D. Number: TO:
Contact Person	Extension	Alternate Contact Person		Extension
Service Unit Approving Officer (Signature required. All incomplete forms will be returned.)				Date

WORK LOCATION

Division/Section	Building	Room Number	Phone Number(s) - if applicable
------------------	----------	-------------	---------------------------------

A. ACTION REQUESTED - VOICE SERVICE (If work location is in Madison Bldg. contact Facility Operations to drill holes)

- ☐ Add New Line ☐ Relocate, From (bldg./rm.): _____ To (bldg./rm.): _____
☐ Disconnect Line ☐ Swap ext.: _____ with ext.: _____ ☐ Other (Describe in Section E)

B. PHONE SET DESCRIPTION: ☐ ADD ☐ CHANGE TYPE ☐ RECONFIGURE SET (Digital Only) ☐ REMOVE

- ☐ 1. Single Line Analog: ☐ 2500 ☐ 2500 with light ☐ 8110
☐ 2. *Multi-Button Digital Set: ☐ 7410 plus ☐ 7406 plus (limited) ☐ 7444 (limited)

*Multi-Button Sets - Submit layout with this form, contact Service Unit Telecommunications Liaison. Feature abbreviations are:

AD - Abbreviated Dial

AMW - Auto Message Waiting

CPU - Call Pick Up

DATE - Date/Time

INSP - Inspect

LXD - Last Extension Called

PROG - Program For AD

SACE - Send All Calls Ext.

- ☐ 3. Data Line and Equipment (limited) (Describe in Section E)

C. FEATURES NEEDED: ☐ ADD ☐ CHANGE ☐ REMOVE

- ☐ AUDIX(full name: _____ ext.: _____) ☐ Call PICK-UP (with ext.: _____)
☐ Auto Attendant/Conversant (Describe in Section E) ☐ Call Coverage, ext(s): _____
☐ Name Change To: _____ ext.: _____ ☐ CMS/ACD (Describe in Section E)

D. DIALING CAPABILITY (RESTRICTION): ☐ ADD ☐ CHANGE

(Note: Each Service Unit is responsible for funding long distance bills)

- ☐ Library Calls Only ☐ Local Calls ☐ Long Distance Calls ☐ Totally Unrestricted Calls ☐ Other (Describe in Section E)

E. COMMENTSDistribution: White & Yellow - Mail to ITS/USG/TAT- Hotline (mail code 9362) or deliver to LM G51, Pink - Requesting Office
LW 1/73 (rev 12/93)

Appropriate Use of and Access to the Internet at the Library of Congress: Policy Guidelines

**Approved by LC Management Team, October 28, 1993
This is an evolving policy, which will be reviewed after one year.**

Introduction

The Internet is an electronic network of computers throughout the world providing communication and resource sharing services to anyone, including students, scholars, librarians, researchers, as well as the general public. Using Internet, one can connect to a computer on the other side of the world as if it were in the next room or mail a single message instantaneously to one or thousands of recipients. The similar technology that links computers and networks globally is also used to interconnect computers inside the Library of Congress, providing significant benefits for internal Library of Congress operations. This technology already allows staff online access to administrative and other information resources, such as SCORPIO and MUMS, the staff phone directory, LC Rule Interpretations and other cataloging documents, texts of LCRs, calendars and events, exhibits, child care information, office service and repair directories, Credit Union information, services for the disabled, and information about all reading rooms.

The Internet consists of over 1,000,000 computers, many of which support thousands of users. All told, it is estimated that there are over 30 million Internet users, and the number of computers and users has been doubling every year. The Internet is not one administrative entity, but rather is a cooperative effort between educational institutions, government agencies, and various commercial and non-profit organizations. Historically, the Internet has contained mostly scientific research and education information. More recently, however, the kind of information accessible over the Internet has expanded to include library catalogs, full text of electronic books and journals, government information, campus-wide information systems, picture archives, and business data and resources.

The three primary functions that people use on the Internet are: electronic mail and discussion groups (MAIL), using remote computers (TELNET), and transferring files (FTP--File Transfer Protocol). At the Library, anyone who has access to CA-eMAIL+ (the mainframe electronic mail system) may send and receive Internet MAIL. Those whose computers are connected to the Library's token ring network additionally have access to TELNET and FTP.

While MAIL allows people to communicate electronically, it does not allow access to most of the search and retrieval tools available on Internet. Although MAIL-only access to the Internet is available to all staff at the Library through CA-eMAIL+, this access should be considered only an *interim solution*. In the long term, all staff should have access to *full* Internet service (MAIL, TELNET, FTP).

Appropriate Use of the Internet

Staff at the Library of Congress should be encouraged to use the Internet to its fullest potential to further the Library's mission, to provide effective service of the highest quality to its constituents, to discover innovative and creative ways to use resources and improve service, and to promote staff development.

Using the Internet at the Library of Congress will mean using any of the three main Internet functions--MAIL, TELNET, and FTP. Internet use may involve internal communication and access to LC systems only. Alternatively, it may involve communication with persons or groups outside the Library, searching off-site databases, or retrieving files from remote sites. Staff may use the Internet for direct job-related purposes, for professional contacts and career development activities, or for personal use.

The Library will reap many benefits by encouraging and supporting staff use of the Internet. Daily tasks will be accomplished more rapidly as staff use the Internet for such things as conference calling, obtaining timely cataloging and reference information, quickly sending and receiving texts, and avoiding telephone tag. Savings can be realized by reducing postage and printing costs and by using electronic mail as an alternative to the telephone in order to reduce long distance charges. Staff efficiency and effectiveness will increase, and new avenues for research and service will be available both to staff and to constituents. As LC offers more products and services via the Internet, the Library strengthens its role and enhances its image as an active member of the electronic community. Finally, since the Library pays one flat fee for all Internet access, the greater the use of the network, the more cost effective it becomes.

Guideline 1: Allow and encourage use of the Internet to accomplish job responsibilities and further the Library's mission.

The Internet provides access to a wide variety of information resources that can aid Library staff in doing their jobs. Examples of job-related use of Internet at the Library of Congress include: accessing external databases and files to obtain reference information or conduct research; searching OCLC and other online public access catalogs for cataloging and reference activities; corresponding with the Library's constituents or providing document delivery; transferring working documents or drafts for comment; disseminating newsletters, press releases, or other documents to large groups of people; acquiring electronic serials, newsletters, and documents for the Library's collections; communicating with and delivering products to congressional offices; and reading electronic mail discussion groups on job-related topics.

These examples demonstrate some of the ways Library staff currently use the Internet in their work. Use of the Internet will become increasingly important for Library staff to accomplish their work, especially as both the variety of resources and the proportion of information available exclusively over the Internet continue to grow. Although the decision as to what extent the Internet is needed for a particular job rests with the supervisor, managers should be aware that the Internet provides a gateway to information that is already useful and will become critical to many jobs within the Library.

Guideline 2: Allow and encourage use of the Internet for professional contacts and career development.

The Internet allows staff members more efficiently to pursue professional and career development goals. Examples of use of Internet for professional contacts and career development include: communicating with fellow members of a committee in a professional organization such as the American Library Association; collaborating on articles and other writing; transferring the full text of manuals, documentation, or self-teaching workbooks; connecting to resources that provide information relating to career and education opportunities; and reading electronic mail discussion groups on professional or future career development topics.

Use of the internet for professional contacts and career development is sometimes job-related and sometimes personal, depending on the activity. Whether or not this type of use can be done on work time will vary depending on the service unit, division, or workgroup. Supervisors should work with employees to determine the appropriateness of using the Internet for professional activities and career development during work hours.

Guideline 3: Allow personal use of the Internet by LC staff on personal time and from home.

Personal use of the Internet provides staff with an opportunity to practice Internet skills and explore Internet resources. The Library benefits by permitting staff to use their own time to develop these skills. In the current environment of shrinking budgets and the need for staff to take on new responsibilities, more responsibilities, and new areas of expertise, use of the Internet can be an important avenue for training and development of skills. Since the Library pays one flat fee for all Internet access, there is no additional cost for personal use of the Internet.

Examples of appropriate personal use of Internet include: sending electronic mail to colleagues and friends around the world; reading electronic mail discussion groups on personal interest topics; transferring the full text of books and journals, software programs, or images; connecting to resources that provide a variety of information such as college curricula, travel advisories, or natural disaster relief; getting information on health/medicine or employee benefits; and exploring the Internet looking for useful information resources. Examples of personal time include: breaks, lunch time, and the time before and after work. In areas of the Library where staff members must share equipment or resources for Internet access, staff members using the resources to accomplish job responsibilities should have priority over those desiring access for personal use.

A policy allowing staff members to use the Internet on personal time would be similar to our existing policy of allowing staff to use Library collections and resources on personal time, and would have similar benefits. Just as a staff member who takes books home, visits the various reading rooms, and participates in Library events learns about the institution and acquires skills to become a better employee, a staff member who makes use of the Internet on personal time enhances knowledge and skills of electronic information resources and gains skills in information technology. This use also enhances job-related knowledge and skills, and provides cost-effective self-training opportunities. By encouraging employees to explore the Internet, the Library also builds its pool of Internet-literate staff who can then guide and encourage those around them.

Guideline 4: Distribute guidelines for responsible network use to all staff and encourage them to use their access to the Internet in a responsible and informed way.

Library staff have an obligation to learn about network etiquette (netiquette), customs, and courtesies. Certain procedures and guidelines should be followed when using electronic mail communications, participating in electronic mail discussion groups, using remote computer services, and transferring files from other computers. Staff also have an obligation to be aware of computer security and privacy concerns and to guard against computer viruses. Any training program developed for the Internet should also include discussion of responsible network use.

Appendix A contains suggested guidelines and staff responsibilities for network use at the Library of Congress.

Appendix A: Guidelines for Responsible Use of Internet at LC

General Responsibilities

Library staff have an obligation to use their access to the Internet in a responsible and informed way, conforming to network etiquette, customs, and courtesies. Use of the Internet encompasses many different interconnected networks and computer systems. Many of these systems are provided free of charge by universities, public service organizations, and commercial companies. Each system has its own rules and limitations, and guests on these systems have an obligation to learn and abide by the rules.

Users should identify themselves properly when using any Internet service. They should also be careful about how they represent themselves, given that what they say or do could be interpreted as Library of Congress opinion or policy. Users should be aware that their conduct can reflect on the reputation of the Library and its staff.

Use of the Internet is a privilege, not a right, which may be revoked at any time for inappropriate conduct. Examples of inappropriate conduct include:

- use of the Internet for unlawful or malicious activities
- use of abusive or objectionable language in either public or private messages
- misrepresentation of oneself or the Library
- sending chain letters
- other activities that could cause congestion and disruption of networks and systems

Responsible Use: Electronic Mail and File Storage Areas

The content and maintenance of a user's electronic mailbox and shared file storage areas are the user's responsibility. Users should:

- Check electronic mail daily.
- Use signature blocks at the bottom of electronic mail messages. Signature blocks should be short, preferably not more than six lines, and should include the user's name, electronic mail address, phone number, and postal address.
- When not officially representing the Library, if the message could be perceived as Library of Congress business or opinion, add a disclaimer to the signature block. An example of a disclaimer is: "The opinions expressed here are my own and do not necessarily represent those of the Library of Congress."

- Be aware that electronic mail is not private communication, because others may be able to read or access mail. Electronic mail may best be regarded as a postcard rather than as a sealed letter.
- Delete unwanted messages or files immediately, because they take up disk storage space.
- Keep messages stored in electronic mailboxes to a minimum.
- Transfer to disks for future reference any messages or files to be saved.
- Maintain shared system storage areas (for example, on the Sequent or the mainframe). Users should keep their files to a minimum. Space is allocated on shared systems. If users exceed their allocated space, a system administrator will notify them and ask them to remove files.

Responsible Use: Electronic Discussion Groups

Staff members who participate in electronic discussion groups (listservs, Usenet newsgroups, etc.) should learn and abide by the rules and etiquette of those groups. Just as different groups of people vary in their expectations, the rules and etiquette may vary among discussion groups. Some general guidelines are:

- Retain initial welcome messages/information files received when first subscribing to a discussion group.
- Observe the conventions and particular interests of the group prior to becoming an active participant.
- Use signature blocks at the bottom of electronic mail messages. Signature blocks should be short, preferably not more than six lines, and should include the user's name, electronic mail address, phone number, and postal address.
- When not officially representing the Library, if the message could be perceived as Library of Congress business or opinion, add a disclaimer to the signature block. An example of a disclaimer is: "The opinions expressed here are my own and do not necessarily represent those of the Library of Congress."
- Keep messages short and to the point. Generally limit messages to one subject.
- Act in a professional and courteous manner. Avoid gossip and remember that statements about others may find their way back to them. Be patient with new users.
- Be clear and concise. Re-read messages before sending them to be sure they will not be misunderstood. Read all messages carefully before responding.
- Be aware of the potential audience in any discussion group and address them accordingly.

- Be careful when using sarcasm and humor. Identify intended humor with standard statements [e.g., "only joking folks"] or with symbols [e.g., :-) smiley face].
- Cite all quotations, references, and sources.
- Limit line length to fewer than 80 characters, because many systems cannot display longer lines.
- Use capitalization sparingly. Capitalizing long portions of a communication is called "shouting" and is considered rude. *Asterisks* or _underscore_characters_ can be used to make a stronger point.
- Use discretion when sending long documents to discussion groups. It is preferable to reference the source of a document and provide instructions on how to obtain a copy.
- Do not forward personal electronic mail messages to discussion groups without the original author's permission.
- Respect copyright and licensing agreements.
- Include only the relevant portions when quoting from a previous message. Clearly identify the quoted portions.
- Learn abbreviation conventions and network jargon. Be aware that these may vary from one discussion group to another. Some common examples include: BTW for "by the way", IMHO for "in my humble opinion", and ;-) depicting winking smiley face.

Responsible Use: TELNET (Using Remote Computers)

When using TELNET to access remote computer systems, users should remember that they are guests on another institution's machine. To help ensure that other Internet users have access to the same information in a timely manner, remote users should observe a few basic courtesies:

- Logoff a remote computer system when finished. Maintaining a connection that is not actively being used may prevent others from connecting to that system.
- Read or obtain instructions or documentation files when using a system for the first time.
- Be aware of time and resource limitations of remote systems. Adhere to any stated restrictions.

Responsible Use: FTP (File Transfer Protocol)

As with TELNET, users are guests on other systems. To ensure that other Internet users have access to the information, a few basic guidelines should be followed:

- Login as *anonymous* and respond to the PASSWORD prompt with your electronic mail address, unless the system specifies otherwise.
- Avoid transferring files during peak business hours for the remote system, whenever possible.
- Be aware of time and resource limitations of remote systems. Adhere to any stated restrictions.
- Remove files transferred to shared system areas as soon as possible. Copy the files to local disks if needed for future use.
- Transfer files directly to diskettes rather than to the hard drive if possible. Check transferred files for viruses. Do not use infected files.
- Respect copyright and licensing agreements of transferred files.

Access to the Internet

Guideline 5: Provide full Internet service to all staff at the Library of Congress who have access to workstation(s) that are used for their daily work.

All staff at the Library can benefit from access to the Internet. This is especially true now with the availability of the Library's new campus-wide information system called LC MARVEL (Library of Congress Machine-Assisted Realization of the Virtual Electronic Library), which contains not only easy access to the vast collections of research materials available on the Internet, but also employee-based information that is of great value to every staff member.

Currently, Information Technology Services (ITS) is coordinating an effort to provide token ring wiring to the entire Library. Connections are due to be completed sometime during FY 1996. This effort will provide the potential for all staff at the Library to gain access to full Internet service. However, it should be noted that token ring wiring provides direct access only to TELNET and FTF functions. In order to send and receive electronic mail messages over the Internet, staff must also have an electronic mail account on a remote system (the mainframe, an Internet server such as the Sequent, or a local area network-based mail server), or they must have workstations which are capable of running mail programs in a multi-processing environment. For technical details about the levels of Internet access that are currently available at the Library, see *Appendix B*.

Guideline 6: Improve interim solutions for staff who need, but do not yet have, access to full Internet service on their workstation(s). Provide shared staff workstations in central locations for use by any staff member, and encourage staff to share workstations which already have access to full Internet service.

Since token ring wiring will not be completed until FY 1996, many staff may need an interim way to access the Internet. There are several possibilities at this time. Each Library office should consider these options and determine which of them will best meet its needs.

One approach is to use dial-up access to an Internet server, such as the LC MAIL server in ITS.

Another approach is to provide staff dial-up access to Internet resources through a communications server, which could be used to provide TELNET access to LC MARVEL or any other host computer on the LC network (including the LC MAIL server). This will not only benefit staff working at the Library, but will also provide service to staff working at home during core hours or during evenings and weekends.

A third approach is to share available workstations among staff. Currently, workstations have been set up in staff areas in the Madison Building for access to LC MARVEL. This type of access should be extended to other Library of Congress sites so that more staff will have convenient access to LC MARVEL and to other Internet functions. Group accounts can be established to support multiple users and can be set up with various capabilities, depending on the needs of the group. For example, these accounts could be configured with full Internet service, enabled only for TELNET and FTF functions (i.e., no electronic mail access), or set up to connect only to LC MARVEL.

Training and Education

It is in the best interest of the Library to have a well-trained and efficient staff. Staff members need both initial and continuing training and active support in all service units of the Library to ensure successful and effective utilization of valuable Internet resources. The Internet Users Group and the Staff Training and Development Office are providing centralized Internet training classes for Library staff. The Internet Users Group has developed and is teaching a course which gives staff an overview and demonstration of the Internet. In the future, a longer hands-on training course will be offered.

Guideline 7: Encourage and allow staff to attend Internet training sessions and use official time to practice the skills learned in those sessions.

While it is a short-term sacrifice to allow staff to attend classes, in the long term the effort will be beneficial. Staff will be better informed about valuable Internet resources and how to use them. All staff should be allowed to attend the overview course, with the supervisor's discretion in scheduling, so that they may develop a better understanding of what the Internet is and how it can be used in the Library. Supervisors should work with employees to determine the appropriateness of attending the hands-on training course, keeping in mind the job requirements and the career development needs of staff members.

As a follow-up to a hands-on Internet training session, staff will need to use the Internet in order to maintain and develop skills learned in the class. Within one week of the training class, staff members should be given at least two hours, scheduled at the discretion of the supervisor, to practice the techniques learned in the class. It is suggested that this time be scheduled, so that other job tasks will not interfere with this important training reinforcement. It is also suggested that occasional practice time be scheduled on a continuing basis.

Guideline 8: Allow staff to serve as trainers for the centralized Internet training courses.

The trainers for centralized Internet courses need to be drawn from different parts of the Library where expertise and knowledge of the Internet reside. There are many qualified staff members who could be called upon as trainers in order to equitably distribute the training workload. Allowing a staff member to serve as a trainer also benefits the staff member's office, because it increases the knowledge within the office and establishes a local resource for support.

Guideline 9: Encourage and allow staff to use official time to attend meetings and programs related to the Internet.

Programs and workshops aid in increasing awareness throughout the Library of the valuable resources available over the Internet. For example, the Internet Users Group offers monthly programs and meetings on a wide range of topics of interest to beginning, intermediate, or expert users. These programs supplement the knowledge that can be gained through formal training courses, serve as an avenue for continuing education and career development, and provide a forum for staff to meet others with similar problems and needs in order to share information.

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Current Options for Internet Access at the Library of Congress

Access Method	Description	MAIL	TELNET	FTP
Terminal connected to the mainframe (indirect Internet access)	All workstations (terminals and personal computers with modems or on the token ring) have the potential for Internet access through the LC mainframe. Although this method is available to many, it is not recommended because it is resource intensive.	MAIL access is available through mainframe CA-eMAIL+/SoftSwitch. Upload/ download of message text is possible but not practical.	Limited TELNET access is possible for those who have the TPX menu.	Limited FTP access is possible for those who have the TPX menu.
DOS workstation with communications software (indirect Internet access)	A DOS workstation with communications software (e.g., Procomm+) is able to dial up another computer that is on the token ring. This access is currently limited to the mainframe and Sequent.	MAIL access is available through CA-eMAIL+/SoftSwitch via dial up connection to the mainframe. MAIL access is also available for Sequent account holders via dial up connections to the Sequent.	Full TELNET access is available from the Sequent. Users must have an account on the Sequent.	Full FTP access is available from the Sequent. Users must have an account on the Sequent.
DOS workstation on the token ring (direct Internet access)	ITS licenses TCP/IP software to allow a DOS workstation on the token ring to function on the Internet. Although this allows for direct use of TELNET and FTP, it allows only indirect use of MAIL.	MAIL access is available through CA-eMAIL+/SoftSwitch via TELNET to the mainframe. MAIL access is also available for Sequent account holders via TELNET to the Sequent.	Full TELNET access is available directly from the DOS workstation.	Full FTP access is available directly from the DOS workstation.
OS/2 workstation on the token ring (direct Internet access)	ITS licenses TCP/IP software to allow OS/2 workstations on the token ring to function on the Internet. Full MAIL, TELNET, and FTP access are available directly from the user's workstation.	Mail access is available through CA-eMAIL+/SoftSwitch which is supplied with each OS/2 workstation.	Full TELNET access is available directly from the OS/2 workstation.	Full FTP access is available directly from the OS/2 workstation.
DOS workstation with MS-Windows on the token ring (direct Internet access)	ITS licenses TCP/IP software to allow DOS workstations with MS-Windows on the token ring to function on the Internet. CRS has also licensed a different TCP/IP software package for MS-Windows. Although this allows for direct use of TELNET and FTP, it allows only indirect use of MAIL.	MAIL access is available through CA-eMAIL+/SoftSwitch via TELNET connection. MAIL access is also available for Sequent account holders via TELNET to the Sequent.	Full TELNET access is available directly from the DOS workstation with MS-Windows.	Full FTP access is available directly from the DOS workstation with MS-Windows.
Macintosh workstation on the token ring (direct Internet access)	ITS licenses TCP/IP software to allow Macintosh workstations on the token ring to function on the Internet. Although this allows for direct use of TELNET and FTP, it allows only indirect use of MAIL.	MAIL access is available through CA-eMAIL+/SoftSwitch via TELNET connection. MAIL access is also available for Sequent account holders via TELNET to the Sequent.	Full TELNET access is available directly from the Macintosh workstation.	Full FTP access is available directly from the Macintosh workstation.

Definitions

Direct Internet Access - The workstation does not need to work through another computer to access the Internet.

Indirect Internet Access - The workstation must establish a connection with another computer to access the Internet.

APPENDIX B

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